

EXHIBIT C9

UNITED STATES DISTRICT COURT
DISTRICT OF NEW JERSEY

**IN RE JOHNSON & JOHNSON
TALCUM POWDER PRODUCTS
MARKETING, SALES PRACTICES,
AND PRODUCTS LIABILITY
LITIGATION**

THIS DOCUMENT RELATES TO ALL CASES

MDL NO. 16-2738 (FLW) (LHG)

**RULE 26 EXPERT REPORT OF
ARCH CARSON, MD, PhD**

Date: November 16, 2018



Arch Carson, MD, PhD

Talcum Powder and Ovarian Cancer

1. Introduction

I was asked to explain the relationship between the regular perineal use of talc-based personal hygiene products and the subsequent development of ovarian cancer in their users. I intend this report to explain this relationship. I will describe ovarian cancer, what is known about its natural history, and will present statistics regarding its incidence, prevalence and fatality. I will then describe what talc is and why talcum powder is used in personal care products. I will then present the scientific evidence linking talc-based personal hygiene products and their components with cancer, and will show how the various components of this evidence, along with other data, lead me to conclude that regular perineal application of talcum powder products causes ovarian cancer in some users, and raises the risk of ovarian cancer in all users.

2. Qualifications

I am a physician who specializes in the practice of medical toxicology. I am currently an Associate Professor at the University of Texas School of Public Health in Houston and the Program Director of the Occupational and Environmental Medicine Residency training program at the University of Texas Health Science Center at Houston. I received my medical degree from the Ohio State University and a doctor of philosophy degree in Toxicology from the Kettering Laboratory at the University of Cincinnati. I am board certified by the American Board of Preventive Medicine in Occupational Medicine, and have been in the continuous practice of medical toxicology since 1991. My professional activities have included patient care, basic and applied research, teaching of medical students, graduate students and post-graduate medical trainees, and professional consulting. I have been a program director of the NIOSH-funded Education and Research Center at the University of Texas for 19 of the last 21 years. Other major collaborations include as Liaison for the World Health Organization Collaborating Centre in Occupational Health and as environmental exposure consultant to the MD Anderson Cancer Center in Houston. My curriculum vitae is attached to this report as Exhibit A.

3. Information reviewed and methodology employed

In the preparation of this report, I have reviewed relevant published scientific and medical literature, reports and documents produced in the process of litigation, and various other documents and websites that I believed to be pertinent to the refinement or extension of my professional opinions. I applied the same methodology and scientific rigor in this research that I use in my academic and clinical practice. Documents and other sources which I considered in reaching my opinions are listed in Exhibit B, "Materials and Data Considered."

4. What is ovarian cancer?

a. What is cancer?

All types of cancer involve the uncontrolled growth and accumulation or dissemination of cells that originated from normal cells, but have been altered so that they behave differently. The many cells of a single cancer that result from this change are typically all derived from a single progenitor cell, and represent a clone of cells. When this clone

reaches sufficient numbers, the cells themselves may develop into a recognizable “mass” that is called a tumor. Tumors may cause symptoms and other health problems simply by taking up space and putting pressure on neighboring structures or blocking important fluid channels or nerves, thus disrupting normal functions of the body. Still other cancers can proliferate into the blood stream. As the number of cancerous cells increase, the biochemically active substances that they produce can also become a problem resulting in abnormal biological responses throughout the body. Some substances that might become a problem in this way include normal or abnormal hormones, enzymes, antibodies, and proteins. Cancerous cells are considered malignant if they lose their normal tendency to stop proliferating when they have filled a space or the bounds of their particular tissue type, referred to as contact inhibition. Malignant cells ignore these boundary cues and may invade other tissue spaces and organs with devastating results. They may also migrate via the blood stream or other routes to distant sites within the body where they set up a new location of tumor growth and tissue invasion. This process is called metastasis. Typically, cancers are not diagnosed until they produce sufficient symptoms or biochemical abnormalities that lead to an exhaustive diagnostic search resulting in their discovery. Occasionally, cancers are discovered accidentally as part of another investigation, e.g. a chest x-ray may find an asymptomatic lung cancer; a blood test may disclose a telltale abnormality. Still fewer cancers are discovered before they cause health problems through screening tests that are sensitive and specific enough to detect common cancers at a preclinical and hopefully highly treatable stage, e.g. routine colonoscopies to detect colon cancer, or PSA blood tests to detect prostate cancer.

b. Carcinogenesis-a two-step process

The process of normal cells becoming cancer cells is generally recognized as resulting from a two-step process.

Initiation. During initiation, a change is produced at one or more places in the DNA of a cell’s chromosomes. Because the DNA represents the genetic code that becomes duplicated and passed along to cells that arise from it, when that cell divides to produce two cells, the change to the genetic code is also duplicated and is present in both of them.

Normally, the abnormal cell that results from a change in the genetic code cannot survive because its cellular machinery is also abnormal and poorly or non-functional. Less often, if the cell is able to survive in the body, it is still abnormal and deformed, and is recognized by the body’s immune system as alien. The immune system attacks it and destroys it, and it does not survive. In the very rare instance that an alteration to the genetic material results in a survivable hereditary change that is not fatal, and which can escape the surveillance of the body’s immune system, the resulting clone may live and persist. (Coussens LM, 2002)

Promotion - Once a cancer clone has been produced, it is at risk for being discovered and destroyed by the body’s immune system, or failing to thrive in an environment for which it is not suited. Promotion is the process by which the cancer clone is shielded

from the body's defenses and is stimulated to undergo rapid growth, transforming a microscopic cancer clone into a self-sustaining symptomatic cancer over time. (Ferrante D, 2007) (Coussens LM, 2002)

Most known carcinogenesis events occur by the two-step process and involve a long latent period between the moment of the alteration in the genetic material and the recognition that a cancer is present. In human cancers, this latent period is often several months to many years in length. The latency period for ovarian cancer, generally, and for cancers induced by environmental agents is usually quite long, often >20 years. (Nadler DL, 2014) Promotion occurs throughout the latent period and stimulates the growing cancerous cells to become a recognizable cancer. A third stage in the natural history of a cancer, referred to as Progression, involves maturation, differentiation or de-differentiation and accumulation of transcriptional changes that solidify the tumor's growth rate and invasiveness. Some carcinogenic substances are initiators and some are promotores, and still others are called complete carcinogens because they are capable of initiation and promotion.

c. Ovarian cancer

Ovarian cancer is a group of cancers that arise in the ovary or in adjacent tissues. It is estimated that about 22,240 women will receive a new diagnosis of ovarian cancer and about 14,070 women will die from ovarian cancer in the United States in 2018.

(American Cancer Society, n.d.) (Torre LA, 2018) Ovarian cancer ranks fifth in cancer deaths among women, and first due to cancers of the female reproductive system. Most ovarian cancers are not discovered until they have reached an advanced stage and have spread to sites elsewhere in the body. Because advanced ovarian cancers are more difficult to treat, they have a high fatality rate. For these reasons, any effective prevention of ovarian cancer or reduction in ovarian cancer risk can have a significant impact on this disease and can save many women's lives.

There are several recognized forms of ovarian cancer that are distinguished by the specific tissues from which they arise, or the microscopic characteristics of the tumor cells themselves. About 85% to 90% of malignant ovarian cancers are epithelial ovarian carcinomas, and the majority of these are of the serous type (American Cancer Society, n.d.) (Prat, 2015). Ovarian, fallopian tube, and peritoneal cancers have a similar clinical presentation and are treated similarly, and current evidence suggests that they may have a common origin, supporting a common staging system (Soong TR, 2018).

Despite significant advances in cancer diagnosis and therapies over the past several decades, there have been few changes in the incidence or fatality rates for ovarian cancer. Consequently, it is worth considering preventable environmental causes of the ovarian cancer epidemic. (Woodruff, 1979) (LA Torre, 2018)

5. What is talc?

a. General

Talc is a hydrated magnesium silicate mineral produced through a metamorphic geological process and having the generalized chemical formula $Mg_3Si_4O_{10}(OH)_2$. Some substitution of atoms occurs in variations of talc found in nature. Small amounts of Aluminum (Al) or Titanium (Ti) can substitute for Silicon, and small amounts of Iron (Fe), Manganese (Mn), Aluminum (Al) and Calcium (Ca) can substitute for Magnesium. This produces slight variations in the color, hardness and chemical properties of the mineral. Talc is the softest mineral on the Mohs Hardness Scale. (King, n.d.) It is essentially insoluble in water, but is slightly soluble in dilute mineral acids. The process seems to involve the extraction of magnesium and other cations leaving only the silicate as silicic acid and silica.

The commercial value of talc stems from its crystalline structure. Most talc is present in natural deposits as the platy form of talc, in which the talc crystals are arranged in large flat sheets running parallel to one another. These sheets are attracted to each other by weak Van der Waals forces that can be easily overcome by mechanical forces, causing the sheets to slide on each other. On the macro scale, this property gives talc its characteristic slippery feeling on the skin. The platy structure also gives talc its ability to absorb moisture and oil. Some talc is found as a fibrous crystalline structure, similar to some asbestos, also a magnesium silicate mineral. In fact, these two minerals are closely related in terms of their formation and composition. Talc deposits are often intermingled with asbestos and vice versa. (Rohl, 1974) (Rohl AN, 1976) (National Institute for Occupational Safety and Health, 2011) (Lockey, 1981)

b. Talcum Powder and Cancer.

Numerous studies have examined the cancer causing characteristics of talc. (Wild, 2006) Talc has caused cancer when implanted in various tissues and under the skin in laboratory animals. It causes inflammation and fibrotic reaction, including the chemotaxis of inflammatory immune cells, and accelerated growth and division of cells in the involved tissues (Okada, 2007). This is a normal body process that leads to the thwarting of infection and rapid healing, but in the absence of tissue injury, accelerated growth and cell division has the effect of amplifying and propagating viable genetic mutations, leading to cancer. Talc particles have been repeatedly demonstrated in ovarian tumor tissues (Henderson WJ C. J., 1971) (Henderson WJ T. H., 1979) and in inflammatory tissue in otherwise normal ovaries (Mostafa SAM, 1985). In 2006, the International Agency for Research on Cancer (IARC) evaluated the published evidence for the carcinogenicity of talc, not containing asbestos fibers, when inhaled into the respiratory system and when applied to the perineum in personal hygiene activities. The agency concluded that talcum powder is a “possible human carcinogen” (Group 2B) when applied to the perineum, meaning that there is insufficient evidence of carcinogenesis in humans, but strong evidence in other mammalian species. IARC also concluded that there was insufficient evidence of carcinogenicity by the inhalation route (Group 3). (International Agency for Research on Cancer, 2010) Since that time,

numerous other studies have added to the data on this issue. A recent meta-analysis showed that talc workers do have an excess of lung cancers. (Chang C-J, 2017)

When implanted under the skin or into tissues of laboratory animals, talcum powder induces an inflammatory response. This reaction involves the chemotaxis of inflammatory cells of the immune system, lymphocytes, neutrophils and macrophages, the release of cytokines that promote membrane permeability and stimulate cell division. As this reaction matures over time, granulomas may begin to develop. All of this signifies that talcum powder is an effective and potent promotor of already initiated genetic alterations. (Fletcher NM M. I., 2018) (Fletcher NM S. G., 2018) (Saed GM, 2017) (Radić I, 1988) (Okada, 2007) Other studies have demonstrated the ability of these same reactions to satisfy the carcinogenic initiation step, characterizing talcum powder as a complete carcinogen. (Shukla A, 2009) (Fletcher NM M. I., 2018)

c. What about asbestos and other components in talc and talc-based products?

Talcum powder products in the marketplace have been shown to contain asbestos. (Paoletti L, 1984) (VanOrden D, 2000) (VanGosen BS, 2004) (Longo WE, 2017) Asbestos is conclusively recognized as a cause of ovarian cancers. The IARC Working Group concluded that “a causal association between exposure to asbestos and cancer of the ovary was clearly established, based on five strongly positive cohort mortality studies of women with heavy occupational exposure to asbestos, (International Agency for Research on Cancer, 2012)” and “studies showing that women and girls with environmental, but not occupational exposure to asbestos had positive, though non-significant, increases in both ovarian cancer incidence and mortality. (Acheson ED, 1982) (Fox, 1982) (Berry G, 2000) (Newhouse ML, 1972) (Reid A H. J., 2008) (Reid A S. A., 2009) (Pira E, 2005) (Magnani C, 2008) (Bertolotti M, 2008) (Ferrante D, 2007) (Germani D, 1999) (Rösler JA, 1994) The classification determined by IARC included all forms of asbestos and talc containing asbestiform fibers (fibrous talc). I have seen evidence that Johnson & Johnson’s talcum powder products contain asbestos and fibrous talc.¹

d. Carcinogenic metals in talcum powder

In addition to other related minerals, talcum powder may contain varying amounts of chromium, cobalt and nickel, metal ions that are recognized as cancer causing. These ions leach out of the talcum powder slowly over time, resulting in continuous, low-level exposure of the surrounding tissues to carcinogenic metals. (Jurinski JB, 2001) I have seen evidence that Johnson & Johnson’s talcum powder products contain nickel (Group 1

¹ Ex. 28, Hopkins Dep. (Aug. 16 & 17, 2018; Oct. 26, 2018; and Nov. 5, 2018); Ex. 47, Pier Dep. (Sept. 12 & 13, 2018); Expert Report of William E. Longo, PhD and Mark W. Rigler, PhD (Nov. 14, 2018)

human carcinogen), chromium (Group 1 human carcinogen), and cobalt (Group 2B-possible human carcinogen).²

e. Other potentially cancer-causing constituents

Johnson & Johnson's Baby Powder and Shower to Shower contain numerous ingredients that have been added to the products, i.e. fragrance chemicals, some of which have been shown to produce cancer in laboratory animals. These substances are likely to be present in very small or trace quantities, and likely present a lower level of risk than the major components, by mass. Nonetheless, any additional risks are added as part of a total risk profile. I have reviewed the report of Dr. Michael Crowley and agree with his conclusions that these chemicals may contribute to the inflammatory properties, toxicity, and potential carcinogenicity of the products.³

6. Epidemiology linking talcum powder and ovarian cancer

Many research studies have shown a strong association between talcum powder exposure and the development of ovarian cancer. (Langseth H, 2008) (Terry KL, 2013) (Schildkraut JM, 2016) (Trabert, 2016) (Berge W, 2017) (Cramer Daniel W, 2016) (Penninkilampi R, 2018)

a. What evidence links exposure to talcum powder products with ovarian cancer?

Multiple epidemiological studies have examined the link between the personal hygiene use of talc containing products and the occurrence of ovarian cancers (Booth M, 1989) (Cook LS K. M., 1997) (Cook LS e. a., 1997) (Cramer DW, 1982) (Whittemore AS, 1988) (Harlow BL W. B., 1989) (Chen Y, 1992) (Harlow BL C. D., 1992) (Rosenblatt KA, 1992) (Hartge P, 1988) (Tzonou A, 1993) (Chang S, 1997) (Heller DS, 1996) (Penninkilampi R, 2018). Talcum powder causes proliferation of human (Prat, 2015) ovarian cells in culture (Buz'Zard AR, 2007), and causes these cells to express reactive oxygen species (ROS) (Buz'Zard AR, 2007).

The research investigating the link between talcum powder exposure and ovarian cancer has been reviewed as a scientific whole at multiple stages. (Harlow BL H. P., 1995) (Ness Roberta B, 1999) (Muscat JE, 2008) (Terry KL, 2013) (Berge W, 2017) (Penninkilampi R, 2018)

Laboratory, animal and human studies support the conclusions that talc causes ovarian cancer, and have filled in the blanks that establish biological plausibility and scientific coherence. (Jaiswal M, 2000) (Balkwill Fran, 2001) (Okada, 2007) (Saed Ghassan M, 2017) (Harper, 2019)

7. Talcum powder product use

² Ex. 47, Pier Dep. (Sept. 12 & 13, 2018)

³ Expert Report of Michael Crowley, PhD (Nov. 12, 2018).

Numerous studies have interviewed women regarding their personal practices of application of talc-based powders to the perineal area. Due to variations in these practices, it has been difficult to estimate dose in order to evaluate the dose response relationship for ovarian cancer. It is also difficult to exactly estimate the quantity of talcum powder administration during personal hygiene activities. For studies that attempted to determine amount of exposure, most relied on a method of estimating the frequency of application and/or the duration of those practices, then simply multiplying to reach a total number of applications over time. (Harlow BL H. P., 1995) (Langseth H, 2008) A review of studies of perineal talcum powder or cornstarch application suggests that the use of cornstarch instead of talcum powder reduces the risk of ovarian cancer. (Whysner J, 2000)

8. Other evidence

- a. Transport of talc-containing materials from the perineum to the upper reproductive tract and body cavities has been shown to occur with startling regularity and with respect to a wide variety of particulate materials. (Egli GE, 1961) (Venter PF, 1979) (Blumenkrantz MJ, 1981) (Halme J, 1984) (Sjösten ACE, 2004) Clearly, sufficient particulate materials applied routinely to the perineum have ready access and in sufficient quantities to produce biological responses in internal tissues, including the ovaries and surrounding structures. There are a limited number of animal studies suggesting that this transport does not occur. (National Toxicology Program, 1993) These are not as compelling as the human evidence because of anatomical and physiological differences between animals and humans in this regard, as well as the overwhelming evidence in humans.

9. Conclusions and opinions

The following conclusions and opinions are expressed with respect to reasonable medical and scientific certainty and I have applied reliable scientific principles and methods to the facts in reaching them. These opinions are based upon the documents and literature reviewed and cited herein, and also upon my own professional training and experience in practice of medicine and medical toxicology.

I. Talcum powder products sold for personal hygiene use are carcinogenic.

Talcum powder is immunogenic, producing chronic inflammation in the tissues in which it sequesters, with the attraction of lymphocytes and macrophages and the ongoing local release of pro-inflammatory cytokines and reactive oxygen species. Further, all talcum powder has some component of mineral fibers that are toxic to macrophages and intensify the inflammatory response and stimulate cell growth and proliferation. The presence of asbestos, fibrous talc, carcinogenic metals and other chemicals further intensify this effect. Cohort and case-control studies have shown statistically significant associations between talc-based powder use and ovarian cancers. The presence of carcinogenic metals such as, chromium, cobalt and nickel, and toxic fragrance components in commercial talcum powder products, adds to their carcinogenic potency. Talcum powder is a complete carcinogen and can both initiate and promote the development of cancers in the tissues in which it sequesters.

II. Perineal use of talcum powder products for feminine hygiene purposes results in direct exposure to the female reproductive tract.

A proportion of talcum powder from personal hygiene applications to the perineum is transported or migrates through the reproductive tract, through the patent fallopian tubes, onto the ovaries and into the pelvic cavity. Talc particles have been identified in reproductive system structures of women who utilize talc powders. These include the uterine cervix, the endometrium, the fallopian tubes and the ovaries. Inhalation is likely a secondary route of exposure.

III. Common carcinogenic constituents of talcum powder products participate in and add to the carcinogenic process.

Naturally occurring carcinogenic components of talcum powder, i.e. asbestos, chromium, nickel, and cobalt, are liberated in bodily fluids and tissues and are free to exert their carcinogenic effects. Added substances that are toxic or carcinogenic, i.e. fragrance chemicals, may also contribute to these effects. This process is the most intense where the duration is the longest. Because the ovaries have no intrinsic elimination system, the transport of talc particles and their constituents reaches the ovaries where it stalls and sequesters. For these reasons, ovarian tissue is most at risk for the carcinogenic effect of these substances.

IV. Regular perineal application of talcum powder products causes epithelial ovarian cancer in some users, and raises the risk of ovarian cancer in all users.

Multiple case-control and cohort epidemiological studies have looked at the relationship between the perineal use of talc-based powders and the eventual development of epithelial ovarian cancer. Most, but not all, of these studies show a consistent positive relationship. When confounding and bias are exhaustively considered, the positive association remains. I conclude that the apparent cause and effect relationship between perineal talcum powder use and ovarian cancer is real, amounting to about a 30% increased risk of ovarian cancer in talcum powder product users. At the current rate of ovarian cancer diagnosis and mortality, elimination of this source of risk could result in over 3,000 lives saved in the U.S. each year.

In 1965, Sir Austin Bradford Hill published what has come to be recognized as the best collection of factors to consider for the assessment of scientific evidence that relates the causation of disease to environmental exposures (Hill, 1965). These factors include: (1) Strength of association, (2) Consistency of the evidence, (3) Specificity, (4) Temporality, (5) Biological gradient, (6) Plausibility, (7) Coherence, (8) Experiment, and (9) Analogy. Below I provide my evaluation of the scientific evidence with respect to the Hill factors.

Strength of association –Many epidemiological studies have attempted to examine the association between perineal use of talcum powder products and ovarian cancer. Most of these have been case-control studies, where women diagnosed with ovarian cancer are paired with others of similar demographic background who do not have ovarian cancer. All of these women are interviewed about their past practices and exposures, including the use of talcum powder products. The resulting data are analyzed to compute an odds ratio (OR) that describes the

likelihood of those with cancer having had greater exposure to talcum powder than those who did not. Cohort studies selected populations of women, assessing them for many factors, including perineal talcum powder use, and followed them over time counting the occurrences of ovarian cancers. These studies were then able to compute a relative risk (RR) of exposure to talcum powder resulting in ovarian cancers. Of more than 25 case-control studies in the literature, the heavy majority showed positive and significant ORs for perineal talcum powder use and ovarian cancer. The three cohort studies did not find a significant relative risk of perineal talcum powder exposure leading to ovarian cancer, but did show positive non-significant trends. Several research groups have looked at the totality of the research evidence, evaluated the published study reports, and have reanalyzed those data on a common playing field through meta-analyses. Taken in their totality, and accounting for sources of bias and differing statistical treatments, these epidemiological studies support a strong association between the perineal use of talcum powder and ovarian cancer.

Consistency of the evidence – As stated above, the majority of epidemiological studies that have investigated the link between perineal talcum powder use and ovarian cancer have reported positive associations. These studies are consistent in their findings of a relationship between perineal use of talcum powder products and the development of ovarian cancer. Further, recent meta-analyses of previously published studies have verified the comparability of the research methods used and the consensus of conclusions.

Specificity – Specificity is the concept that a specific disease, rather than a host of diseases, is produced by a particular exposure, and that the exposure is a principal cause of the disease. Although talcum powder is known to cause non-specific inflammation in many tissues where its residues locate, the stimulation of ovarian cancer is particularly associated with the presence of talc in the ovaries and fallopian tubes. Of known factors associated with ovarian cancer, i.e. nulliparous state, early menarche, late menopause, oral contraceptive use, living in the twentieth century and beyond, perineal talcum powder exposure is proving to be prominent among them.

Temporality – If a particular exposure is the cause of a particular disease, then the onset of exposure should precede the onset of the disease. Studies investigating the link between perineal talcum powder exposure and ovarian cancer are designed to compare those with prior exposure to those who are not exposed, and so the scientific evidence supports this consideration.

Biological gradient – A basic toxicological principle is that a greater exposure intensity will result in a larger proportion of those exposed expressing the toxic effect, in this case ovarian cancer. In order to determine the intensity of a long-term environmental exposure, typically a measure of frequency or quantity of use is multiplied by the duration of such use. This allows categorization of exposure levels and comparisons. Although some studies have failed to find evidence of a dose-response relationship, several more recent reports have shown a clear dose-response when the number of subjects rose to a level producing sufficient statistical power to allow the analysis after subdivision of subjects into pertinent categorical groups, and frequency and duration were measured (Schildkraut JM, 2016) (Cramer Daniel W, 2016) (Wu, et al., 2009).

Plausibility – This factor expects the rational presentation of a mechanism whereby the exposure in question leads to the disease. Thus, if no such mechanism can be proposed, it is less likely that causation will be supported. In the case of ovarian cancer, the mechanism supported in the literature is as follows: Talcum powder products are applied to the perineal area in the course of routine personal hygiene practices. This element is supported by the existence of these products in the marketplace for many years and the statements of subjects interviewed for the purpose of conducting the scientific research discussed elsewhere in this report. Portions of the applied powders are transferred via active processes or passive mass action movements into the female reproductive tract, some making it all the way to the distal fallopian tubes, the ovary surfaces and the pelvic and peritoneal cavities. This element is supported by the observations that particulate materials of differing variety can make their ways along these pathways to the listed destinations, and the finding and confirmation of talc particles in normal ovarian tissues and ovarian tumor tissues at the time of oophorectomy or autopsy. Once reaching the target tissues, talcum powder and its constituents initiate carcinogenesis via multiple means, including, inflammation with chemotaxis of inflammatory cells, liberation of cytokines, and reactive oxygen species, inactivation of TP53 genetic modulator, inhibition of DNA repair, and long-term promotion of genetic mutations via continuous inflammation and cellular growth stimulation.

Coherence – The proposed cause and effect relationship should not “seriously conflict with the generally known facts of the natural history and biology of the disease.”(Hill, 1965) The proposal that talcum powder product use results in the occurrence of ovarian cancer is entirely consistent with what is known about other factors related to ovarian cancer, i.e. early menarche, late menopause, pregnancies, breastfeeding history, oral contraceptive use, etc. All are factors that influence the local inflammatory environment of the ovary and its surroundings and have the potential to promote existing transcriptional errors and mutations.

Experiment – Interventions, such as tubal ligation that decreases the incidence of ovarian cancer by blocking the exposure route, offers experimental support for this mechanism. The use of cornstarch-based dusting powders as a substitute for talcum powder products offers additional experimental support.

Analogy – Have there been other environmental exposures that have been associated with ovarian cancers that act via similar mechanisms? Talcum powder is somewhat unique in terms of its delivery mechanism. But beyond that, the case of asbestos exposure is similar. Asbestos exposure has resulted in excesses of ovarian cancers in exposed women, although the route of exposure is thought to be by inhalation. Nonetheless, asbestos is a mineral very similar both chemically and structurally to talc that has been found in the ovary and peritoneal cavity of exposed women. The mechanisms of carcinogenesis for both asbestos and talc are similar and analogous. Further, talc-based products contain asbestos and non-asbestos mineral fibers having carcinogenic potential.

When considering these factors, I gave the most weight to the compelling strength of association and consistency, as well as the well-described biologic mechanism.

The currently available scientific research, when considered in its totality, demonstrates a cause and effect relationship between the use of talcum powder products and the development of epithelial ovarian cancer. This opinion is reinforced by my consideration of the Hill factors for the assessment of causation.

In reviewing the scientific and medical literature on talcum powder product use, I also performed a risk assessment and considered whether perineal use of those products poses a safety risk to consumers. This involved careful consideration of the epidemiological literature, data on the dose-response relationship and exposure, as well as the nature of these products, which are used primarily for personal care. I also considered evidence of the toxicity of these products, for which repeated testing and analyses have shown to contain carcinogens.

In considering the weight of this epidemiologic, toxicologic, and mechanistic evidence, across multiple studies, time, demographics, and researchers, demonstrating a consistent association between perineal use of talcum powder products and ovarian cancer, it is my opinion that talcum powder products increase the risk of ovarian cancer and pose a significant health hazard.

In conclusion, it is my opinion that the perineal use of talcum powder products causes ovarian cancer in some users and increases the risk of ovarian cancer in all users of these products.

All of my opinions in this report are provided with respect to a reasonable degree of medical and scientific certainty. I reserve the right to amend or supplement my report as new information becomes available.

References

- Acheson ED, G. M. (1982). Mortality of two groups of women who manufactured gas masks from chrysotile and crocidolite asbestos: a 40-year follow-up. *British Journal of Industrial Medicine*, 39, 344-348.
- American Cancer Society. (n.d.). *Key Statistics for Ovarian Cancer*. Retrieved October 31, 2018, from American Cancer Society: <https://www.cancer.org/cancer/ovarian-cancer/about/key-statistics.html>
- American Cancer Society. (n.d.). *What Is Ovarian Cancer?* Retrieved 10 31, 2018, from American Cancer Society: <https://www.cancer.org/cancer/ovarian-cancer/about/what-is-ovarian-cancer.html>
- Balkwill Fran, M. A. (2001). Inflammation and cancer: back to Virchow? *The Lancet*, 357, 540-545.
- Berge W, e. a. (2017). Genital use of talc and risk of ovarian cancer: a meta-analysis. *European Journal of Cancer Prevention*.
- Berry G, N. M. (2000). Mortality from all cancers of asbestos factory workers in east London 1933-80. *Occupational and Environmental Medicine*, 57, 782-785.
doi:0.1136/oem.57.11.782

- Bertolotti M, F. D. (2008). Mortality in the cohort of the asbestos cement workers in the Eternit plant in Casale Monferrato (Italy). *Epidemiol Prev*, 32, 218-228.
- Blumenkrantz MJ, G. N. (1981). Retrograde menstruation in women undergoing chronic peritoneal dialysis. *57(5)*, 667-670.
- Booth M, B. V. (1989). Risk factors for ovarian cancer: a case-control study. *British Journal of Cancer*, 60, 592-598.
- Buz'Zard AR, L. B. (2007). Pycnogenol reduces talc-induced neoplastic transformation in human ovarian cell cultures. *Phytotherapy Research*, 21, 579-586.
- Chang C-J, e. a. (2017). Occupational exposure to talc increases the risk of lung cancer: a meta-analysis of occupational cohort studies. *Canadian Respiratory Journal*, 2017(1270608), 1-12. Retrieved from <https://doi.org/10.1155/2017/1270608>
- Chang S, R. H. (1997). Perineal talc exposure and risk of ovarian carcinoma. *Cancer*, 79, 2396-2401.
- Chen Y, W. P. (1992). Risk factors for epithelial ovarian cancer in Beijing, China. *International Journal of Epidemiology*, 21, 23-29.
- Cook LS, e. a. (1997). Erratum in "Perineal powder exposure and the risk of ovarian cancer". *American Journal of Epidemiology*, 148, 410.
- Cook LS, K. M. (1997). Perineal powder exposure and the risk of ovarian cancer. *American Journal of Epidemiology*, 145, 459-465.
- Coussens LM, Z. W. (2002). Inflammation and cancer. *Nature*, 420(6917), 860–867.
doi:10.1038/nature01322
- Cramer Daniel W, V. A. (2016). The Association Between Talc Use and Ovarian Cancer: A Retrospective Case-Control Study in Two US States. *Epidemiology*, 27, 334-346.
- Cramer DW, W. W. (1982). Ovarian cancer and talc: A case-control study. *Cancer*, 50, 372-376.
- Egli GE, M. N. (1961). The transport of carbon particles in the human female reproductive tract. *Fertility and Sterility*, 12(2), 151-155.
- Ferrante D, B. M. (2007). Cancer mortality and incidence of mesothelioma in a cohort of wives of asbestos workers in Casale Monferrato. *Environmental Health Perspectives*, 115, 1401-1405.
- Fletcher NM, M. I. (2018). Talcum powder enhances oxidative stress in ovarian cancer cells. *Presented at the 65th meeting of the Society for Reproductive Investigation, San Diego California*.
- Fletcher NM, S. G. (2018). Talcum powder enhances cancer antigen 125 in ovarian cancer cells and normal ovarian epithelial cells. *Presented at the 65th meeting of the Society for Reproductive Investigation, San Diego California*.

- Fox, A. W. (1982). Mortality of female gas mask assemblers. *British Journal of Industrial Medicine*, 39, 34-38.
- Germani D, B. S. (1999). Cohort and mortality study of women compensated for asbestosis in Italy. *American Journal of Industrial Medicine*, 36, 129-134. doi:10.1002/(SICI)1097-0274(199907)36:1<129::AID-AJIM18>3.0.CO;2-9
- Halme J, e. a. (1984). Retrograde menstruation in healthy women and in patients with endometriosis. *Obstetrics and Gynecology*, 64(2), 151-154.
- Harlow BL, C. D. (1992). Perineal exposure to talc and ovarian cancer risk. *Obstetrics and Gynecology*, 80, 19-26.
- Harlow BL, H. P. (1995). A review of perineal talc exposure and risk of ovarian cancer. *Regulatory Toxicology and Pharmacology*, 21, 254-260.
- Harlow BL, W. B. (1989). A case-control study of borderline ovarian tumors: the influence of perineal exposure to talc. *American Journal of Epidemiology*, 130, 390-394.
- Harper, S. (2019). Talc induces a pro-oxidant state in normal and ovarian cancer cells through gene point mutations in key redox enzymes. *pending publication*.
- Hartge P, H. R. (1988). Talc and ovarian cancer [letter]. *JAMA*, 250, 1844.
- Heller DS, W. C. (1996). The relationship between perineal cosmetic talc usage and ovarian talc particle burden. *American Journal of Obstetrics and Gynecology*, 174, 1507-1510.
- Henderson WJ, C. J. (1971). Talc and carcinoma of the ovary and cervix. *Journal of Obstetrics and Gynaecology of the British Commonwealth*, 78, 266-272.
- Henderson WJ, T. H. (1979). Talc in normal and malignant tissue. *The Lancet*, 499.
- Hill, A. (1965). The environment and disease: Association or causation. *Proceedings of the Royal Society of Medicine*, 58(5), 295-300.
- International Agency for Research on Cancer. (2010). *IARC Monographs on the Evaluation of Carcinogenic Risks to Humans: Volume 93 - Carbon Black, Titanium Dioxide, and Talc*. Lyon, Freance.
- International Agency for Research on Cancer. (2012). Arsenic, Metals, Fibres and Dusts, Vol 100C, A review of human carcinogens. In IARC, *IARC Monographs on the Evaluation of Carcinogenic Risks to Humans*. Lyon, France: World Health Organization.
- Jaiswal M, L. N. (2000). Inflammatory cytokines induce DNA damage and inhibit DNA repair in cholangiocarcinoma cells by a nitric oxide-dependent mechanism. *Cancer Res*, 60, 184-190.
- Jurinski JB, R. J. (2001). Biodurability of talc. *American Mineralogist*, 86(4), 392-399.

- King, H. M. (n.d.). *Talc: The Softest Mineral*. Retrieved 10 31, 2018, from Geology.com:
<https://geology.com/minerals/talc.shtml>
- LA Torre, B. T. (2018). Ovarian Cancer Statistics, 2018. *CA A Cancer Journal for Clinicians*, 68, 284–296.
- Langseth H, H. S. (2008). Perineal use of talc and risk of ovarian cancer. *J Epidemiol Community Health*, 62, 358-360. doi:10.1136/jech.2006.047894
- Lockey, J. (1981). Nonasbestos fibrous minerals. *Clinics in Chest Medicine*, 2(2), 203-218.
- Longo WE, M. R. (2017). *Analysis of Johnson and Johnson Baby Powder and Valiant Shower To Shower Talc Products for Amphibole (Tremolite) Asbestos: Expert Report*. Materials Analytical Services, LLC, Atlanta .
- Magnani C, F. D.-A. (2008). Cancer risk after cessation of asbestos exposure: a cohort study of Italian asbestos cement workers. *Occupational and Environmental Medicine*, 65, 164-170. doi:10.1136/oem.2007.032847
- Mostafa SAM, e. a. (1985). Foreign body granulomas in normal ovaries. *Obstetrics and Gynecology*, 66(5), 701-702.
- Muscat JE, H. M. (2008). Perineal Talc Use and Ovarian Cancer: A Critical Review. *Eur J Cancer Prev.*, 17(2), 139-146. doi:10.1097/CEJ.0b013e32811080ef
- Nadler DL, I. Z. (2014). Estimating Cancer Latency Times Using a Weibull Model. *Advances in Epidemiology*, 2014, 1-8. doi:10.1155/2014/746769
- National Institute for Occupational Safety and Health. (2011). *Asbestos fibers and other elongate mineral particles: State of the science and roadmap for research*. NIOSH Current Intelligence Bulletin No. 62.
- National Toxicology Program. (1993). *Toxicology and Carcinogenesis Studies of Talc (CAS No 14807-96-6)(NonAsbestiform) in F344/N.Rats and B6C3F1 Mice (Inhalation Studies)* (1993). Washington: USDHHS.
- Ness Roberta B, C. C. (1999). Possible role of ovarian epithelial inflammation in ovarian cancer. *Journal of the National Cancer Institute*, 91, 1459-1467.
- Newhouse ML, B. G. (1972). A study of the mortality of female asbestos workers. *British Journal of Industrial Medicine*, 29, 134-141.
- Okada, F. (2007). Beyond foreign-body-induced carcinogenesis: Impact of reactive oxygen species derived from inflammatory cells in tumorigenic conversion and tumor progression. *International Journal of Cancer*, 121, 2364–2372.
- Paoletti L, S. C. (1984). Evaluation by Electron Microscopy Techniques of Asbestos Contamination in Industrial, Cosmetic, and Pharmaceutical Talc. *Regulatory Toxicology and Pharmacology*, 4, 222-235.

- Penninkilampi R, E. G. (2018). Perineal Talc Use and Ovarian Cancer: A Systematic Review and Meta-Analysis. *Epidemiology*, 29, 41-49. doi:10.1097/EDE.0000000000000745
- Pira E, P. C. (2005). Cancer mortality in a cohort of asbestos textile workers. *British Journal of Cancer*, 92, 580-586. doi:10.1038/sj.bjc.6602240
- Prat, J. (2015). Abridged Republication of FIGO's Staging Classification for Cancer of the Ovary, Fallopian Tube, and Peritoneum. *Cancer*, 121, 3452-3454.
- Radić I, e. a. (1988). Immunosuppression induced by talc granulomatosis in the rat. *Clin Exp Immunol*, 73, 316-321.
- Reid A, H. J. (2008). The mortality of women exposed environmentally and domestically to blue asbestos at Wittenoom, Western Australia. *Occupational and Environmental Medicine*, 65, 743-749. doi:10.1136/oem.2007.035782
- Reid A, S. A. (2009). Gynecologic and breast cancers in women after exposure to blue asbestos at Wittenoom. *Cancer Epidemiol Biomarkers Prev*, 18, 140-147. doi:10.1158/1055-9965.EPI-08-0746
- Rohl AN, e. a. (1976). Consumer talcums and powders: mineral and chemical characterization. *Journal of Toxicology and Environmental Health*, 2, 255-284.
- Rohl, A. (1974). Asbestos in talc. *Environmental Health Perspectives*, 9, 129-132.
- Rosenblatt KA, S. M. (1992). Mineral fiber exposure and the development of ovarian cancer. *Gynecological Oncology*, 45, 20-25.
- Rösler JA, W. H. (1994). Mortality rates in a female cohort following asbestos exposure in Germany. *Journal of Occupational Medicine*, 36, 889-893.
- Saed Ghassan M, D. M. (2017). Updates of the role of oxidative stress in the pathogenesis of ovarian cancer. *Gynecologic Oncology*, 145, 595-604.
doi:<http://dx.doi.org/10.1016/j.ygyno.2017.02.033>
- Saed GM, D. M. (2017). Updates on the role of oxidative stress in the pathogenesis of ovarian cancer. *Gynecologic Oncology*, 145, 595-602.
- Schildkraut JM, A. S.-S. (2016). Association between Body Powder Use and Ovarian Cancer: The African American Cancer Epidemiology Study (AACES). *Cancer Epidemiology, Biomarkers & Prevention*, 25(10), 1411-1417. doi:10.1158/1055-9965.EPI-15-1281
- Shukla A, e. a. (2009). Alterations in gene expression in human mesothelial cells correlate with mineral pathogenicity. *American Journal of Respiratory Cell and Molecular Biology*, 41, 114-123.
- Sjösten ACE, H. E. (2004). Retrograde migration of glove powder in the human female genital tract. *Human Reproduction*, 19(4), 991-995. doi:10.1093/humrep/deh156

- Soong TR, H. B. (2018). Evidence for lineage continuity between early serous proliferations (ESPs) in the Fallopian tube and disseminated high-grade serous carcinomas. *Journal of Pathology*, 246(3), 344-351. doi:10.1002/path.5145
- Terry KL, e. a. (2013). Genital powder use and risk of ovarian cancer: a pooled analysis of 8,525 cases and 9,859 controls. *Cancer Prevention Research*, 6(8), 811-821.
- Torre LA, B. T. (2018). Ovarian Cancer Statistics, 2018. *CA Cancer J Clin*, 68, 284-296.
- Trabert, B. (2016). Body Powder and Ovarian Cancer Risk—What Is the Role of Recall Bias? *Cancer Epidemiology, Biomarkers and Prevention*, 25(10), 1369-1370.
- Tzonou A, P. A. (1993). Hair dyes, analgesics, tranquilizers and perineal talc application as risk factors for ovarian cancer. *International Journal of Cancer*, 55, 408-410.
- VanGosen BS, L. H. (2004). *A USGS Study of Talc Deposits and Associated Amphibole Asbestos Within Mined Deposits of the Southern Death Valley Region, California*. United States Geological Survey. Retrieved from <https://pubs.usgs.gov/of/2004/1092/>
- VanOrden D, L. R. (2000). *Weight Percent Compositional Analysis of Seven RTV Talc Samples. Analytical Report to R. T. Vanderbilt Company, Inc.* 22 November 2000. Submitted to Public Comments Record – C. W. Jameson, National Toxicology Program, 10th ROC Nominations "Talc (containing asbestos fibers)". 4 December 2000., National Toxicology Program.
- Venter PF, M. I. (1979). Migration of a particulate radioactive tracer from the vagina to the peritoneal cavity and ovaries. *S Afr Med J*, 55, 917-919.
- Whittemore AS, W. M. (1988). Personal and environmental characteristics related to epithelial ovarian cancer. II. Exposures to talcum powder, tobacco, alcohol, and coffee. *American Journal of Epidemiology*, 128, 1228-1240.
- Whysner J, M. M. (2000). Perineal application of talc and cornstarch powders: Evaluation of ovarian cancer risk. *Am J Obstet Gynecol*, 182, 720-724.
- Wild, P. (2006). Lung cancer risk and talc not containing asbestos fibres: a review of the epidemiological evidence. *Occup Environ Med*, 63, 4-9. doi:10.1136/oem.2005.020750
- Woodruff, J. (1979). The pathogenesis of ovarian neoplasias. *The Johns Hopkins Medical Journal*, 144(4), 117-120.

Exhibit A

Curriculum Vitae

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Biosketch

Arch "Chip" Carson, MD, PhD is a physician (The Ohio State University), board certified in Occupational Medicine (American Board of Preventive Medicine), who holds a Doctor of Philosophy degree in Toxicology (University of Cincinnati, Kettering Laboratory). He has served on the faculty of the University of Cincinnati and the New York University Medical Center and joined the faculty of the University of Texas School of Public Health in 1992 in its Environmental Sciences Discipline and Occupational and Environmental Health and Aerospace Medicine Module. He is Associate Professor of Occupational Health, directs the Occupational and Environmental Medicine Residency Program and is a member of the research team of the Southwest Center for Occupational and Environmental Health, a NIOSH Education and Research Center, and WHO Collaborating Centre in Occupational Health. He maintains a clinical practice of occupational medicine and medical toxicology. In his more recent role as Medical Director for the University of Texas Medical Branch in Galveston, he is responsible for the health monitoring and care of more than 15,000 employees. He is a frequent consultant to governments, corporations and the legal community on matters related to industrial chemical exposure, toxicology and environmental justice. His research interests include: environmental and occupational chemical exposures, inhalation injuries, metal exposures and cancer, and professional training in occupational medicine.

Professional Activities/Employment

- | | |
|---------|--|
| 2017-18 | University of Texas Medical Branch, Galveston, Assistant Clinical Professor of Preventive Medicine and Family Medicine |
| 2017-18 | University of Texas Medical Branch, Galveston, Medical Director, Employee Health Services. |
| 2017-18 | Enbridge Corporation, Houston Texas, Medical Director, Employee Health Services. |
| 2010-18 | University of Texas Health Science Center, Houston, Associate Professor of Occupational Health. |
| 2010-18 | University of Texas Health Science Center at Houston, Program Director, Occupational and Environmental Medicine Residency. |
| 1991-18 | Private practice of Occupational Medicine and Toxicology, New York, Texas and Ohio. |
| 2011-18 | Spectra Energy Corporation, Houston Texas, Medical Director, Employee Health Services. |
| 1997-13 | Texas Medical Center Inc., Houston Texas, Medical Director, Employee Health Services. |
| 1992-08 | University of Texas School of Public Health, Assistant Professor of Occupational Medicine and Environmental Sciences. |
| 1998-08 | University of Texas Health Science Center at Houston, Program Director, Occupational and Environmental Medicine Residency. |
| 2003-08 | Southwest Center for Occupational and Environmental Health, Principal Investigator and Director, Diller Phosgene Exposure Incident Registry of the American Chemistry Council. |

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- 2000-06 Chevron Phillips Chemical Company, Houston Texas, Corporate Medical Director.
- 2003-05 U.S. Department of Energy Office of Worker Advocacy Physician Review Panel Appointee.
- 1997-04 Southwest Center for Occupational and Environmental Health, Principal Investigator, City of Houston Lead Poisoning Epidemiology Project.
- 1992-03 UT Health Services, University of Texas Houston Health Science Center, Attending Physician, Occupational Medicine and Toxicology.
- 1997-01 University of Houston Downtown, Medical Director, Student Health Service.
- 1998-99 University of Texas School of Public Health, Convener of the Occupational/Environmental Health and Aerospace Medicine Module.
- 1992-97 Respiratory Consultants of Houston, PA, Attending Physician, Occupational Medicine and Toxicology.
- 1992-95 Exxon Chemical Americas, Baytown Polymer Center and Basic Chemicals Technology, Baytown TX, Consultant Physician.
- 1990-91 New York University Medical Center, Bellevue Hospital, Tisch Hospital, and Manhattan VA Hospital, New York NY, Dept. of Medicine, Clinical Instructor.
- 1982-90 Chemical Information Services Inc, Cincinnati OH, Associate in Toxicology.
- 1978-87 University of Cincinnati College of Medicine, Cincinnati OH, Instructor and Lecturer, Adjunct Assistant Professor of Industrial Toxicology.
- 1974-79 University of Cincinnati College of Medicine, Kettering Laboratory, Cincinnati OH, Research Technologist in Occupational Medicine and Clinical Studies.
- 1969-74 Millstone Inc., Cincinnati OH, Design Engineer, environmental control systems.

Educational Background

- 2002 Certificate of Board Eligibility, Medical Toxicology, American Board of Preventive Medicine/American Board of Emergency Medicine
- 1992 Certificate of Training - Residency in Occupational Medicine University of Texas Health Science Center at Houston, School of Public Health, and Southwest Center for Occupational and Environmental Health, Houston TX, 1992.
- 1991 Certificate of Training - Postgraduate Internship in Internal Medicine, New York University Medical Center and Bellevue Hospital Center, New York NY.
- 1990 MD - Ohio State University College of Medicine, Columbus OH.
- 1987 PhD - Kettering Laboratory, University of Cincinnati College of Medicine, Cincinnati OH, awarded in the field of "Environmental Health – Toxicology."
- 1973 BS - University of Cincinnati College of Arts and Sciences Cincinnati OH. Awarded in "Biological Sciences with Concentration in Engineering."
- 1969 Rensselaer Polytechnic Institute, Troy NY. Management Engineering
- 1968 Villa Madonna College, Covington KY. Certificate in Contemporary Physics.

Fellowships

- 2011-13 UTHealth, Health Educators Fellowship, University of Texas Health Science Center at Houston.

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- 1983-85 American Lung Association Fellowship in Lung Research (Inhalation Toxicology), American Lung Association of Southwestern Ohio, Grant.
- 1981-82 Owens Corning Fiberglas, Graduate Research Fellowship in Combustion Toxicology.
- 1979-80 National Institute for Occupational Safety and Health, Centers for Disease Control, Doctoral Fellowship in Industrial Toxicology.

Certifications

- 2012 License to practice medicine, State of Ohio 35.098635
- 2010 Certified Healthy Homes Specialist – National Environmental Health Association.
- 2002 Board Eligibility, Medical Toxicology, American Board of Preventive Medicine/American Board of Emergency Medicine.
- 1994 Board Certification, Occupational Medicine, American Board of Preventive Medicine.
- 1992 License to practice medicine, State of Texas J2524.
- 1991 License to practice medicine, State of New York 186563.
- 1982 Emergency Hazard Response, Environmental and Industrial Chemical Accident Management, U.S. Environmental Protection Agency.
- 1979 Pulmonary Function Testing for Occupational Surveillance, NIOSH #003.

Professional Community Service

- 2013-18 University of Texas Health Science Center at Houston, Steering Committee on Interprofessional Collaboration
- 2013-18 University of Texas Health Science Center at Houston, Chemical Safety Committee.
- 1998-18 Association of Environmental and Occupational Clinics/ATSDR community resource on toxic exposures and health consequences, Federal Region VI.
- 1997-18 City of Houston Biological, Chemical and Radiation Emergency Preparedness Program. Medical Toxicology On-Call Advisor to the Houston Medical Strike Team.
- 1998-18 Association of Occupational and Environmental Medicine Residency Directors. Chairman 2005-2006
- 2010-18 University of Texas Health Science Center at Houston, Graduate Medical Education Committee
- 1997-08 University of Texas Health Science Center, Houston, Community/Press Resource and Speaker via Public Information Office, (Toxic Exposures and Environmental Health).
- 1996-18 American College of Occupational and Environmental Medicine, Council on Academic Affairs and Co-chair, Academic Section 2004-2006. Occupational Medicine Residency Directors Committee, Chair 2006-2007, Appointed Member, Taskforce on the Future of Occupational Medicine Education 2005-2007. Appointed Co-chair, Taskforce on the Future of Occupational Medicine Education 2013-2015.
- 1996-18 Texas College of Occupational and Environmental Medicine. Secretary/Treasurer-2004-5, President Elect-2005-6, President-2006-7, Past President 2007-8.
- 2003-12 Boy Scouts of America, Sam Houston Council, Registered Adult Leader and Merit Badge Counselor.
- 2005-08 University of Texas School of Public Health, Practice Council Co-chair

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- 2003-05 U.S. Department of Energy Office of Worker Advocacy Physician Review Panel Appointee.
- 1996-00 American Public Health Association, Occupational Health Subcommittee
- 1994-96 Advisory Board, National Environmental Education and Training Center (NEETC), Curriculum Development Committee.
- 1981-85 Tri-State Air Committee Inc., Cincinnati OH, (voluntary air quality organization) Scientific Advisor, Elected to Board of Directors in 1982, President and Chairman 1984-85.
- 1981-85 American Lung Association of Southwestern Ohio, Cincinnati OH, (voluntary health organization) speakers bureau.
- 1982-83 City of Cincinnati, Appointment to Occupational Health Scientific Liaison Board (municipal advisory committee).
- 1981-83 Cincinnati Area Toxic Substances Coalition, Cincinnati OH, (coalition of business, voluntary, and labor organizations with interest in environmental toxic substance issues) Cofounder and Chairman.
- 1982-83 Ohio River Valley Committee on Occupational Safety and Health, Cincinnati OH, (organized labor coalition) Scientific Resource Committee.
- 1972-82 Walnut Hills-Evanston Medical Center, Cincinnati OH, (primary care center) Board of Directors.

Professional Societies

- 1991-18 American College of Occupational and Environmental Medicine.
- 1991-18 Texas College of Occupational and Environmental Medicine
- 2007-18 Texas Public Health Association.
- 2006-18 International Congress on Occupational Health.
- 2003-18 American College of Medical Toxicology.
- 2002-06 Society of Occupational and Environmental Health.
- 2001-06 American Conference of Governmental Industrial Hygienists.
- 1994-00 American Public Health Association.
- 1983-87 American Industrial Hygiene Association.
- 1983-87 Society of Toxicology.
- 1980-85 American Thoracic Society, Associate Member and Participant in Occupational and Environment Scientific Session.

Publications

Anderson F, **Carson A**, Whitehead L and Burau K. Age, Race and Gender Spatiotemporal Disparities of COPD Emergency Room Visits in Houston, Texas. *Occupational Diseases and Environmental Medicine*. 3:1-9, 2015. <http://dx.doi.org/10.4236/odem.2015.31001>.

Anderson F, **Carson A**, Whitehead L and Burau K. Spatiotemporal Analysis of the Effect of Ozone and Fine Particulate on CVD Emergency Room Visits in Harris County, Texas. *Open Journal of Air Pollution*, 3:87-99, 2014. <http://dx.doi.org/10.4236/ojap.2014.34009>.

A CARSON– revised July, 2018

Calcote, JC, **Carson, A**, Peskin, MF, Emery, RJ. An assessment of post-disaster psychological stress in hazardous waste operations and emergency response (HAZWOPER) workers. *Disaster Med Public Health Preparedness*. 7:452-460, 2013. PMID 24274124.

Delclos GL, Tullis LA, **Carson A**. The services industry. In *Occupational and Environmental Lung Diseases*. Tarlo SM, Cullinan, Nemery B eds. 2010 pp.258-271. Wiley-Blackwell, West Sussex, UK.

Pugach S, Clarkson T, (**Carson A**). Prenatal mercury exposure and postnatal outcome: clinical case report and analysis. *Clin Toxicol* 47:366-370, 2009.

Pauluhn J, **Carson A**, Costa DL, Gordon T, Kodavanti U, Last JA, Matthay MA, Pinkerton KE and Sciuto AM. Workshop summary: phosgene-induced pulmonary toxicity revisited: appraisal of early and late markers of pulmonary injury from animal models with emphasis on human significance. *Inhalation Toxicology*. 19(10):789-810, 2007.

Delclos GL, Gimeno D, Arif AA, Burau KD, **Carson A**, Lusk C, Stock T, Symanski E, Whitehead LW, Zock JP, Benavides FG and Anto JM. Occupational risk factors and asthma among health care professionals, *American Journal of Respiratory & Critical Care Medicine*. 175(7):667-75, 2007.

Savely SM, **Carson A** and Delclos GL. "A survey of the implementation status of environmental management systems in U.S. colleges and universities" *J Cleaner Production*, 15(7) 650-659, 2007.

Savely SM, **Carson A** and Delclos GL. "An environmental management system implementation model for U.S. colleges and universities" *J Cleaner Production*, 15(7) 660-670, 2007.

Delclos GL, Arif AA, Aday L, **Carson A**, Lai D, Lusk C, Stock T, Symanski E, Whitehead LW, Benavides FG and Anto JM. Validation of an asthma questionnaire for use in healthcare workers. *Occupational & Environmental Medicine*. 63(3):173-9, 2006.

Delclos GL, Bright KA, **Carson A**, Felknor SA, Mackey TA, Morandi MT, Schulze LJH and Whitehead LW. "A global survey of occupational health competencies and curriculum" *International Journal of Occupational and Environmental Health*; 11:181-194, 2005.

Nooka A, Duonghi L, **Carson A**, Hassan M. Assessing Occupational Risk for Pancreatic Cancer by Chemical Exposures and Work History: A Case-Control study at MD Anderson Cancer Center. American Association for Cancer Research, Orlando. March, 2004.

Mitchell CS, Moline J, Avery AN, Baker D, Blessman JE, **Carson A**, Cosby O, Darcey D, Ducatman A, Emmett EA, Forst L, Gerr F, Gochfeld M, Guidotti TL, Harber P, Hu H, Hegmann KT, Kipen HM, Levin J, McGrail MP, Meyer JD, Mueller KL, Prince S, Rubin R, Schwerha JJ, Sprince NL, Taiwo O and Upfal M. In response to the 2002, vol. 22, no. 4 article entitled "The rise and fall of occupational medicine in the United States" [Letter] *Am J Preventive Med*. 23(4):307-9, 2002.

Carson A and Delclos GL. "The Respiratory System," in *Modern Industrial Hygiene: Volume II – Biological Aspects*, JL Perkins, ed. 2003, American Conference of Governmental Industrial Hygienists, Cincinnati.

Carson A, Colombo S and Alavi. A, City of Houston Childhood Lead Poisoning Prevention Program: Case Density and Impact Analysis, March 31, 2000, Technical Report (Principal Investigator).

Townsend MC, Lockey JE, Velez H, **Carson A**, Cowl CT, Delclos GL, Gerstenhaber BJ, Harber PI, Horvath EP, Jolly AT, Jones SH, Knackmuhs GG, Lindesmith LA, Markham TN, Raymond LW, Rosenberg DM, Sherson D, Smith DD, and Wintermeyer SF. ACOEM Position Statement – "Spirometry in the Occupational Setting" *JOEM*; 42: 228-245, 2000.

Bright K, Delclos G, **Carson A**, Felknor S, Mackey T, Morandi M, Schultz L and Whitehead L. A Global Study of Occupational Health Competencies and Curricula, Report to the World Health Organization, March, 2000, Southwest Center for Occupational and Environmental Health.

Carson A, Guevara E, Delclos GL, Murray KA, Burau KD, Morandi MT, Felknor SA, ("A Study of General Health of Workers of the Industrial Complex of Barrancabermeja") in [Compendium on Occupational Health in the Petroleum Industry of Colombia: Technical and Scientific Report of the "Occupational Health in the Petroleum Industry" Project], 1999 Pan American Health Organization (co-author).

Carson A, Hangoc V and Bahrainwala M, City of Houston Childhood Lead Poisoning Prevention Program: Case Density and Impact Analysis, June 30, 1999, Technical Report (Principal Investigator).

Carson A, Spears B, and Burau K, City of Houston Childhood Lead Poisoning Prevention Program: Case Density and Impact Analysis, June 30, 1998, Technical Report (Principal Investigator).

Carson A, Detry M, Spears B, and Burau K, City of Houston Childhood Lead Poisoning Prevention Program: Case Density and Impact Analysis, June 30, 1997, Technical Report (Principal Investigator).

Delclos GL and **Carson A**, "Acute Gaseous Exposures," in Occupational and Environmental Respiratory Diseases, P Harber, M Schenker, and J Balmes eds. 1995, Mosby Yearbook Pub., St. Louis.

Carson A, "Respiratory Effects of Exposure to Fresh Smokes from Pyrolytic Decomposition of Styrene Plastic in Rats." Doctoral Dissertation, University of Cincinnati Kettering Laboratory, 1987.

Carson A, "A Dynamic Method for the Generation of Fresh Smokes From Combustion or Pyrolytic Decomposition of Structural Materials." Doctoral Dissertation, University of Cincinnati Kettering Laboratory, 1987.

Samuels SJ, Lemasters GK and **Carson A**, "Statistical Methods for Describing Occupational Exposure Measurements," Am. Ind. Hyg. Assoc. J., 46:427-433, 1985.

Lemasters GK, **Carson A** and Samuels SJ, "Occupational Styrene Exposure for Twelve Product Categories in the Reinforced-Plastics Industry," Am. Ind. Hyg. Assoc. J., 46:434-441, 1985.

Lockey JE, Brooks SM, Jarabek AM, Khouri PR, McKay RT, **Carson A**, Morrison JA, Wiot JF and Spitz HB. "Pulmonary changes after exposure to vermiculite contaminated with fibrous tremolite" Am Rev Respir Dis. 129(6):952-8, 1984.

Lockey JE, Jarabek A, **Carson A**, McKay R, Harber P, Khouri P, Morrison J, Wiot J, Spitz H and Brooks SM, "Pulmonary Hazards from Vermiculite," in Health Issues Related to Metal and Nonmetallic Mining, WL Wagner, W Rom and P Merchant eds. 1983, Butterworth's, Boston.

Vinegar A and **Carson A**, "Pulmonary Function Changes in Chinese Hamsters Exposed Six Months to Diesel Exhaust," Environ Int, 5:369-371, 1981.

Lockey JE, Jarabek A, **Carson A**, McKay R, Harber P, Khouri P, Morrison J, Prior J and Brooks SM, "Health Effects of Vermiculite Exposure," Am Rev Respir Dis, 123:133, 1981 abstract.

Lockey JE, Jarabek A, **Carson A**, McKay R, Harber P, Khouri P, Morrison J and Brooks SM, "Single-Breath Diffusing Capacity (DLCOsb) in a Working Population," Am Rev Respir Dis, 123:132, 1981 abstract.

Vinegar A, **Carson A** and Pepelko WE, "Pulmonary Function Changes in Chinese Hamsters Exposed to Diesel Exhaust," in Health Effects of Diesel Engine Emissions, Vol. 2, WE Pepelko, RM Danner and NA Clarke eds, 1980, US Environmental Protection Agency, Washington.

Carson A, Vinegar A, Leng J and Cooper G, "Effects of Chronic Exposure to some Diesel Exhaust Components on Lung Function in Rats," Fed Proc, 39:1091, 1980 abstract.

A CARSON– revised July, 2018

Elia VJ, Anderson LA, MacDonald TJ, **Carson A**, Buncher CR and Brooks SM, "Determination of Urinary Mandelic and Phenylglyoxylic Acids in Styrene Exposed Workers and a Control Population," Am Ind Hyg Assoc J, 41:922-926, 1980.

Brooks SM, Anderson LA, Emmett E, **Carson A**, Tsay JY, Elia VJ, Buncher CR and Karbowsky R, "The Effects of Protective Equipment on Styrene Exposure in Workers in the Reinforced Plastics Industry," Arch Environ Health, 35:287-294, 1980.

Brooks SM, Zipp T, Barber M and **Carson A**, "Measurement of Maximal Expiratory Flow Rates in Cigarette Smokers Using Gases of High and Low Densities," Am Rev Respir Dis, 118:75-81, 1978.

Exhibit B

LITERATURE:

- “A Survey of the Long-Term Effects of Talc and Kaolin Pleurodesis.” *British Journal of Diseases of the Chest* 73 (1979): 285–88.
- Acencio, Milena M. P., Evaldo Marchi, Lisete R. Teixeira, Bruna Rocha Silva, Juliana Sanchez Silva, Carlos Sergio Rocha Silva, Vanessa Adelia Alvarenga, Leila Antonangelo, Francisco Suso Vargas, and Vera Luiza Capelozzi. “Talc Particles and Pleural Mesothelium Interface Modulate Apoptosis and Inflammation.” *Pathology* 46, no. S2 (2014): S76.
- ACGIH. Product: Asbestos: TLV(R) Chemical Substances 7th Edition Documentation. Accessed August 16, 2018.
- ACGIH. 2017 TLVs and BEIs: ACGIH. Accessed August 16, 2018.
- Acheson, E D, M J Gardner, E C Pippard, and L P Grime. “Mortality of Two Groups of Women Who Manufactured Gas Masks from Chrysotile and Crocidolite Asbestos: A 40-Year Follow-Up.” *British Journal of Industrial Medicine* 39, no. 4 (November 1982): 344–48.
- Akhtar, Mohd Javed, Maqsood Ahamed, M.A. Majeed Khan, Salman A. Alrokayan, Iqbal Ahmad, and Sudhir Kumar. “Cytotoxicity and Apoptosis Induction by Nanoscale Talc Particles from Two Different Geographical Regions in Human Lung Epithelial Cells.” *Environmental Toxicology* 29 (2014): 394–406.
- Akhtar, Mohd Javed, Sudhir Kumar, Ramesh Chandra Murthy, Mohd Ashquin, Mohd Imran Khan, Govil Patil, and Iqbal Ahmad. “The Primary Role of Iron-Mediated Lipid Peroxidation in the Differential Cytotoxicity Caused by Two Varieties of Talc Nanoparticles on A549 Cells and Lipid Peroxidation Inhibitory Effect Exerted by Ascorbic Acid.” *Toxicology in Vitro: An International Journal Published in Association with BIBRA* 24, no. 4 (June 2010): 1139–47.
- American Cancer Society. “Key Statistics for Ovarian Cancer.”
- American Cancer Society. “What Is Ovarian Cancer?,”
- Anderson, Garnet L., Howard L. Judd, Andrew M. Kaunitz, David H. Barad, Shirley A. A. Beresford, Mary Pettinger, James Liu, S. Gene McNeely, Ana Maria Lopez, and Women’s Health Initiative Investigators. “Effects of Estrogen plus Progestin on Gynecologic Cancers and Associated Diagnostic Procedures: The Women’s Health Initiative Randomized Trial.” *JAMA* 290, no. 13 (October 1, 2003): 1739–48.
- Antoniou, A., P. D. P. Pharoah, S. Narod, H. A. Risch, J. E. Eyfjord, J. L. Hopper, N. Loman, et al. “Average Risks of Breast and Ovarian Cancer Associated with BRCA1 or BRCA2 Mutations Detected in Case Series Unselected for Family History: A Combined Analysis of 22 Studies.” *American Journal of Human Genetics* 72, no. 5 (May 2003): 1117–30.
- Arellano-Orden, Elena, Auxiliadora Romero-Falcon, Jose Martin Juan, Manuel Ocana Jurado, Francisco Rodriguez-Panadero, and Ana Montes-Worboys. “Small Particle-Size Talc Is Associated with Poor Outcome and Increased Inflammation in Thoracoscopic Pleurodesis.” *Respiration* 86 (2013): 201–9.
- Armstrong, Deborah K., Brian Bundy, Lari Wenzel, Helen Q. Huang, Rebecca Baergen, Shashikant Lele, Larry J. Copeland, Joan L. Walker, Robert A. Burger, and Gynecologic Oncology Group. “Intraperitoneal Cisplatin and Paclitaxel in Ovarian Cancer.” *The New England Journal of Medicine* 354, no. 1 (January 5, 2006): 34–43.
- “ATSDR - Toxicological Profile: Asbestos.” Accessed August 16, 2018.
- Baldwin, Lauren A., Bin Huang, Rachel W. Miller, Thomas Tucker, Scott T. Goodrich, Iwona

- Podzielinski, Christopher P. DeSimone, Fred R. Ueland, John R. van Nagell, and Leigh G. Seamon. "Ten-Year Relative Survival for Epithelial Ovarian Cancer:" *Obstetrics & Gynecology* 120, no. 3 (September 2012): 612–18.
- Balkwill, Fran, and Alberto Mantovani. "Inflammation and Cancer: Back to Virchow?" *The Lancet* 357, no. 9255 (February 2001): 539–45.
- Bartrip, P.W. "History of Asbestos Related Disease." *Postgrad Med J* 80 (2004): 72–76.
- Beck, B. D., H. A. Feldman, J. D. Brain, T. J. Smith, M. Hallock, and B. Gerson. "The Pulmonary Toxicity of Talc and Granite Dust as Estimated from an in Vivo Hamster Bioassay." *Toxicology and Applied Pharmacology* 87, no. 2 (February 1987): 222–34.
- Begg, Melissa D., and Dana March. "Cause and Association: Missing the Forest for the Trees." *American Journal of Public Health* 108, no. 5 (May 2018): 620.
- Belotte, Jimmy, Nicole M. Fletcher, Awoniyi O. Awonuga, Mitchell Alexis, Husam M. Abu-Soud, Ghassan M. Saed, Michael P. Diamond, and Mohammed G. Saed. "The Role of Oxidative Stress in the Development of Cisplatin Resistance in Epithelial Ovarian Cancer." *Reproductive Sciences* 21, no. 4 (2014): 503–8.
- Belotte, Jimmy, Nicole M. Fletcher, Mohammed G. Saed, Mohammed S. Abusamaan, Gregory Dyson, Michael P. Diamond, and Ghassan M. Saed. "A Single Nucleotide Polymorphism in Catalase Is Strongly Associated with Ovarian Cancer Survival." *PloS One* 10, no. 8 (2015).
- Berge, Wera, Kenneth Mundt, Hung Luu, and Paolo Boffetta. "Genital Use of Talc and Risk of Ovarian Cancer: A Meta-Analysis." *European Journal of Cancer Prevention*, January 2017, 1.
- Berge. "Genital Use of Talc and Risk of Ovarian Cancer: A Meta-Analysis." *European Journal of Cancer Prevention: The Official Journal of the European Cancer Prevention Organisation (ECP)* 27, no. 3 (2018): 248–57.
- Berry, G., M. L. Newhouse, and J. C. Wagner. "Mortality from All Cancers of Asbestos Factory Workers in East London 1933-80." *Occupational and Environmental Medicine* 57, no. 11 (November 2000): 782–85.
- Bertolotti, Marinella, Daniela Ferrante, Dario Mirabelli, Mario Botta, Marinella Nonnato, Annalisa Todesco, Benedetto Terracini, and Corrado Magnani. "[Mortality in the cohort of the asbestos cement workers in the Eternit plant in Casale Monferrato (Italy)]." *Epidemiologia E Prevenzione* 32, no. 4–5 (October 2008): 218–28.
- Blank, M M, N Wentzensen, M A Murphy, A Hollenbeck, and Y Park. "Dietary Fat Intake and Risk of Ovarian Cancer in the NIH-AARP Diet and Health Study." *British Journal of Cancer* 106, no. 3 (January 31, 2012): 596–602.
- Blejer, H. and Robert Arlon. "Talc: A Possible Occupational and Environmental Carcinogen." *Journal of Occupational Medicine* No. 15(2) (February 1973): 92–97.
- Blount, A M. "Amphibole Content of Cosmetic and Pharmaceutical Talc." *Environmental Health Perspectives* 94 (August 1991): 225–30.
- Bluemel, Piza, and Zischka-Konorsa, W. "Animal experimental investigations of tissue reactions to starch and talcum powder after intraperitoneal application." *Wiener klinische Wochenschrift* 74, no. 1 (January 1962).
- Blumenkrantz, M. J., N. Gallagher, R. A. Bashore, and H. Tenckhoff. "Retrograde Menstruation in Women Undergoing Chronic Peritoneal Dialysis." *Obstetrics and Gynecology* 57, no. 5 (May 1981): 667–70.
- Boorman, G. A., and J. C. Seely. "The Lack of an Ovarian Effect of Lifetime Talc Exposure in

- F344/N Rats and B6C3F1 Mice.” *Regulatory Toxicology and Pharmacology: RTP* 21, no. 2 (April 1995): 242–43.
- Booth, M., V. Beral, and P. Smith. “Risk Factors for Ovarian Cancer: A Case-Control Study.” *British Journal of Cancer* 60, no. 4 (October 1989): 592–98.
- Bottazzi, Barbara, Elio Riboli, and Alberto Mantovani. “Aging, Inflammation and Cancer.” *Seminars in Immunology*, November 5, 2018.
- Brand, K.G., Lance C. Buoen, Kenneth H. Johnson, and Inge Brand. “Etiological Factors, Stages, and the Role of the Foreign Body in Foreign Body Tumorigenesis: A Review.” *Cancer Research* No. 35 (February 1975): 279–286.
- Brand, K.G. “Cancer Associated with Asbestosis, Schistosomiasis, Foreign Bodies, and Scars.” *Cancer: A Comprehensive Treatise* 2nd Edition. Etiology: Chemical and Physical Carcinogenesis. Plenum Press. (1982).
- Brand, K.G. “Solid State Carcinogenesis.” *Barbury Report 25: Nongenotoxic Mechanisms in Carcinogenesis*. (1987).
- Brodeur, Paul. “The Magic Mineral.” *The New Yorker* October 12, 1968.
- Bunderson-Schelvan, Melisa, Jean C. Pfau, Robert Crouch, and Andrij Holian. “Nonpulmonary Outcomes of Asbestos Exposure.” *Journal of Toxicology and Environmental Health. Part B, Critical Reviews* 14, no. 1–4 (2011): 122–52.
- Burn, John, Anne-Marie Gerdes, Finlay Macrae, Jukka-Pekka Mecklin, Gabriela Moeslein, Sylviane Olschwang, Diane Eccles, et al. “Long-Term Effect of Aspirin on Cancer Risk in Carriers of Hereditary Colorectal Cancer: An Analysis from the CAPP2 Randomised Controlled Trial.” *Lancet (London, England)* 378, no. 9809 (December 17, 2011): 2081–87.
- Butterworth, B.E., J.A.A Popp, R.B. Connolly and T.L. Goldsworthy. “Chemically Induced Cell Proliferation in Carcinogenesis.” *Mechanisms of Carcinogenesis in Risk Identification*. (1992): 279–305.
- Buz’Zard, Amber R., and Benjamin H. S. Lau. “Pycnogenol® Reduces Talc-Induced Neoplastic Transformation in Human Ovarian Cell Cultures.” *Phytotherapy Research* 21, no. 6 (June 2007): 579–86.
- Caldwell, Carlyle G., White Thomas Aubrey, William L. George, and James J. Eberl. Medical dusting powder. United States US2626257A, filed May 21, 1952, and issued January 20, 1953.
- Camargo, M. Constanza, Leslie T. Stayner, Kurt Straif, Margarita Reina, Umaima Al-Alem, Paul A. Demers, and Philip J. Landrigan. “Occupational Exposure to Asbestos and Ovarian Cancer: A Meta-Analysis.” *Environmental Health Perspectives* 119, no. 9 (September 2011): 1211–17.
- Carr, C.J. “Talc: Consumer Uses and Health Perspectives” 21 (1995): 211–15.
- Chan, Andrew T., Edward L. Giovannucci, Jeffrey A. Meyerhardt, Eva S. Schernhammer, Gary C. Curhan, and Charles S. Fuchs. “Long-Term Use of Aspirin and Nonsteroidal Anti-Inflammatory Drugs and Risk of Colorectal Cancer.” *JAMA* 294, no. 8 (August 24, 2005): 914–23.
- Chang, Che-Jui, Yu-Kang Tu, Pau-Chung Chen, and Hsiao-Yu Yang. “Occupational Exposure to Talc Increases the Risk of Lung Cancer: A Meta-Analysis of Occupational Cohort Studies.” *Canadian Respiratory Journal*, 2017.
- Chang, Stella, and Harvey A. Risch. “Perineal Talc Exposure and Risk of Ovarian Carcinoma.” *Cancer* 79, no. 12 (June 15, 1997): 2396–2401.

- Chen, F., K. Gaitskell, M. J. Garcia, A. Albukhari, J. Tsaltas, and A. A. Ahmed. "Serous Tubal Intraepithelial Carcinomas Associated with High-Grade Serous Ovarian Carcinomas: A Systematic Review." *BJOG: An International Journal of Obstetrics and Gynaecology* 124, no. 6 (May 2017): 872–78.
- Chen, Lee-May, and Jonathan S Berek. "Overview of Epithelial Carcinoma of the Ovary, Fallopian Tube, and Peritoneum." *UpToDate*, 2018.
- Chen, L-M, et al. "Epithelial Carcinoma of the Ovary, Fallopian Tube, and Peritoneum: Epidemiology and Risk Factors - UpToDate," 2018.
- Chen, Xi, Gerd A. Müller, Marianne Quaas, Martin Fischer, Namshik Han, Benjamin Stutchbury, Andrew D. Sharrocks, and Kurt Engeland. "The Forkhead Transcription Factor FOXM1 Controls Cell Cycle-Dependent Gene Expression through an Atypical Chromatin Binding Mechanism." *Molecular and Cellular Biology* 33, no. 2 (January 2013): 227–36.
- Chen, Y., P. C. Wu, J. H. Lang, W. J. Ge, P. Hartge, and L. A. Brinton. "Risk Factors for Epithelial Ovarian Cancer in Beijing, China." *International Journal of Epidemiology* 21, no. 1 (February 1992): 23–29.
- Chien, Jeremy, Hugues Sicotte, Jian-Bing Fan, Sean Humphray, Julie M. Cunningham, Kimberly R. Kalli, Ann L. Oberg, et al. "TP53 Mutations, Tetraploidy and Homologous Recombination Repair Defects in Early Stage High-Grade Serous Ovarian Cancer." *Nucleic Acids Research* 43, no. 14 (August 18, 2015): 6945–58.
- Chittenden, B. G., G. Fullerton, A. Maheshwari, and S. Bhattacharya. "Polycystic Ovary Syndrome and the Risk of Gynaecological Cancer: A Systematic Review." *Reproductive Biomedicine Online* 19, no. 3 (September 2009): 398–405.
- Cibula, D., M. Widschwendter, O. Májek, and L. Dusek. "Tubal Ligation and the Risk of Ovarian Cancer: Review and Meta-Analysis." *Human Reproduction Update* 17, no. 1 (January 1, 2011): 55–67.
- Cibula, David, Martin Widschwendter, Michael Zikan, and Ladislav Dusek. "Underlying Mechanisms of Ovarian Cancer Risk Reduction after Tubal Ligation." *Acta Obstetricia Et Gynecologica Scandinavica* 90, no. 6 (June 2011): 559–63.
- CIMBA, Georgia Chenevix-Trench, Roger L Milne, Antonis C Antoniou, Fergus J Couch, Douglas F Easton, and David E Goldgar. "An International Initiative to Identify Genetic Modifiers of Cancer Risk in BRCA1 and BRCA2 Mutation Carriers: The Consortium of Investigators of Modifiers of BRCA1 and BRCA2 (CIMBA)." *Breast Cancer Research* 9, no. 2 (December 2007).
- Cohen, Samuel M., and Lora L. Arnold. "Chemical Carcinogenesis." *Toxicological Sciences* 120, no. suppl_1 (March 1, 2011): S76–92.
- Colditz, Graham A. "Cancer Prevention." *UpToDate*, 2018.
- Collaborative Group on Epidemiological Studies of Ovarian Cancer, V. Beral, R. Doll, C. Hermon, R. Peto, and G. Reeves. "Ovarian Cancer and Oral Contraceptives: Collaborative Reanalysis of Data from 45 Epidemiological Studies Including 23,257 Women with Ovarian Cancer and 87,303 Controls." *Lancet* 371, no. 9609 (January 26, 2008): 303–14.
- Collaborative Group On Epidemiological Studies Of Ovarian Cancer, V. Beral, K. Gaitskell, C. Hermon, K. Moser, G. Reeves, and R. Peto. "Menopausal Hormone Use and Ovarian Cancer Risk: Individual Participant Meta-Analysis of 52 Epidemiological Studies." *Lancet (London, England)* 385, no. 9980 (May 9, 2015): 1835–42.

- Committee on Practice Bulletins—Gynecology, Committee on Genetics, Society of Gynecologic Oncology. “Practice Bulletin No 182: Hereditary Breast and Ovarian Cancer Syndrome.” *Obstetrics and Gynecology* 130, no. 3 (2017): e110–26.
- Compton, Sarah A., Sezgin Ozgür, and Jack D. Griffith. “Ring-Shaped Rad51 Paralog Protein Complexes Bind Holliday Junctions and Replication Forks as Visualized by Electron Microscopy.” *The Journal of Biological Chemistry* 285, no. 18 (April 30, 2010): 13349–56.
- Cook, Linda S., Mary L. Kamb, and Noel S. Weiss. “Perineal Powder Exposure and the Risk of Ovarian Cancer.” *American Journal of Epidemiology* 145, no. 5 (March 1, 1997): 459–65.
- Cook, LS. “Erratum in ‘Perineal Powder Exposure and the Risk of Ovarian Cancer’.” *American Journal of Epidemiology* 148, no. 410 (1997).
- Coussens, Lisa M., and Zena Werb. “Inflammation and Cancer.” *Nature* 420, no. 6917 (December 19, 2002): 860–67.
- Cralley, L. J., M. M. Key, D. H. Groth, W. S. Lainhart, and R. M. Ligo. “Fibrous and Mineral Content of Cosmetic Talcum Products.” *American Industrial Hygiene Association Journal* 29, no. 4 (August 1968): 350–54.
- Cramer, D. W. “Perineal Talc Exposure and Subsequent Epithelial Ovarian Cancer: A Case-Control Study.” *Obstetrics and Gynecology* 94, no. 1 (July 1999): 160–61.
- Cramer, D. W., R. F. Liberman, L. Titus-Ernstoff, W. R. Welch, E. R. Greenberg, J. A. Baron, and B. L. Harlow. “Genital Talc Exposure and Risk of Ovarian Cancer.” *International Journal of Cancer. Journal International Du Cancer* 81, no. 3 (May 5, 1999): 351–56.
- Cramer, D. W., W. R. Welch, R. E. Scully, and C. A. Wojciechowski. “Ovarian Cancer and Talc: A Case-Control Study.” *Cancer* 50, no. 2 (July 15, 1982): 372–76.
- Cramer, Daniel W., Linda Titus-Ernstoff, John R. McKolanis, William R. Welch, Allison F. Vitonis, Ross S. Berkowitz, and Olivera J. Finn. “Conditions Associated with Antibodies Against the Tumor-Associated Antigen MUC1 and Their Relationship to Risk for Ovarian Cancer.” *Cancer Epidemiology Biomarkers & Prevention* 14, no. 5 (May 1, 2005): 1125–31.
- Cramer, Daniel W., Allison F. Vitonis, Kathryn L. Terry, William R. Welch, and Linda J. Titus. “The Association between Talc Use and Ovarian Cancer: A Retrospective Case-Control Study in Two US States.” *Epidemiology (Cambridge, Mass.)*, December 17, 2015.
- Cramer, Daniel, et al. “The Association Between Talc Use and Ovarian Cancer: A Retrospective Case-Control Study in Two US States.” *Epidemiology (Cambridge, Mass.)* 27, no. 3 (May 2016): 334–46.
- Cramer, Daniel W., William R. Welch, Ross S. Berkowitz, and John J. Godleski. “Presence of Talc in Pelvic Lymph Nodes of a Woman with Ovarian Cancer and Long-Term Genital Exposure to Cosmetic Talc.” *Obstetrics and Gynecology* 110, no. 2 Pt 2 (August 2007): 498–501.
- Cramer, Daniel W., William R. Welch, Robert E. Scully, and Carol A. Wojciechowski. “Ovarian Cancer and Talc. A Case-Control Study.” *Cancer* 50, no. 2 (July 15, 1982): 372–76.
- Crum, Christopher P., Jonathan Bijron, and Brooke E. Howitt. “Pathogenesis of Ovarian, Fallopian Tubal, and Peritoneal Serous Carcinomas.” *UpToDate*, 2018.
- Crusz, Shanthini M., and Frances R Balkwill. “Inflammation and Cancer: Advances and New Agents.” *Nature Reviews Clinical Oncology* 12 (October 2015): 584–96.
- Curtis D. Klaassen, and John Doull. *Casarett and Doull’s Toxicology : The Basic Science of*

- Poisons*. 8th Edition. McGraw-Hill Education, 2013.
- Danforth, Kim N., Shelley S. Tworoger, Jonathan L. Hecht, Bernard A. Rosner, Graham A. Colditz, and Susan E. Hankinson. "Breastfeeding and Risk of Ovarian Cancer in Two Prospective Cohorts." *Cancer Causes & Control: CCC* 18, no. 5 (June 2007): 517–23.
- Demirer, Ersin, Christian F. Ghattas, Mohamed O. Radwan, and Elamin M. Elamin. "Clinical and Prognostic Features of Erionite-Induced Malignant Mesothelioma." *Yonsei Med J* 56(2) (2015): 311–323.
- Devaja, Omer. *Ovarian Cancer From Pathogenesis to Treatment*. IntechOpen, 2018.
- Ding, Yuan C., Lesley McGuffog, Sue Healey, Eitan Friedman, Yael Laitman, Shani-Paluch-Shimon, Bella Kaufman, et al. "A Nonsynonymous Polymorphism in IRS1 Modifies Risk of Developing Breast and Ovarian Cancers in BRCA1 and Ovarian Cancer in BRCA2 Mutation Carriers." *Cancer Epidemiology, Biomarkers & Prevention: A Publication of the American Association for Cancer Research, Cosponsored by the American Society of Preventive Oncology* 21, no. 8 (August 2012): 1362–70.
- Dixon, Suzanne C., Christina M. Nagle, Nicolas Wentzensen, Britton Trabert, Alicia Beeghly-Fadiel, Joellen M. Schildkraut, Kirsten B. Moysich, et al. "Use of Common Analgesic Medications and Ovarian Cancer Survival: Results from a Pooled Analysis in the Ovarian Cancer Association Consortium." *British Journal of Cancer* 116, no. 9 (April 25, 2017): 1223–28. <https://doi.org/10.1038/bjc.2017.68>.
- Dodson, R. F., M. O'Sullivan, C. J. Corn, and S. P. Hammar. "Quantitative Comparison of Asbestos and Talc Bodies in an Individual with Mixed Exposure." *American Journal of Industrial Medicine* 27, no. 2 (February 1995): 207–15.
- Donaldson, Ken. "The Inhalation Toxicology of p-aramid Fibrils." *Critical Reviews in Toxicology*, No. 39(6) (2009): 487–500.
- Donaldson, Ken, Fiona A. Murphy, Rodger Duffin, Craig A. Poland. "Asbestos, Carbon Nanotubes and the Pleural Mesothelium: A Review of the Hypothesis Regarding the Role of Long Fibre Retention in the Parietal Pleura, Inflammation and Mesothelioma." *Particle and Fibre Toxicology* No. 7 (2010): 5.
- D.R. Petterson. "JNJ 000251888," April 26, 1973.
- Dubeau, L., and R. Drapkin. "Coming into Focus: The Nonovarian Origins of Ovarian Cancer." *Annals of Oncology: Official Journal of the European Society for Medical Oncology* 24 Suppl 8 (November 2013): viii28–35. <https://doi.org/10.1093/annonc/mdt308>.
- Eberl, J. J., and W. L. George. "Comparative Evaluation of the Effects of Talcum and a New Absorbable Substitute on Surgical Gloves." *American Journal of Surgery* 75, no. 3 (March 1948): 493–97.
- Egli, G. E., and M. Newton. "The Transport of Carbon Particles in the Human Female Reproductive Tract." *Fertility and Sterility* 12 (April 1961): 151–55.
- Eng, Kevin H., J. Brian Szender, John Lewis Etter, Jasmine Kaur, Samantha Poblete, Ruea-Yea Huang, Qianqian Zhu, et al. "Paternal Lineage Early Onset Hereditary Ovarian Cancers: A Familial Ovarian Cancer Registry Study." *PLoS Genetics* 14, no. 2 (February 2018): e1007194. <https://doi.org/10.1371/journal.pgen.1007194>.
- "Expert Report of Michael Crowley, Ph.D., In Re: Talcum Powder Prod. Liab. Litig., MDL No. 2738," November 12, 2018.
- Fasching, Peter A., Simon Gayther, Leigh Pearce, Joellen M. Schildkraut, Ellen Goode, Falk Thiel, Georgia Chenevix-Trench, et al. "Role of Genetic Polymorphisms and Ovarian Cancer Susceptibility." *Molecular Oncology* 3, no. 2 (April 2009): 171–81.

- [https://doi.org/10.1016/j.molonc.2009.01.008.](https://doi.org/10.1016/j.molonc.2009.01.008)
- Fathalla, M. F. "Incessant Ovulation and Ovarian Cancer - a Hypothesis Re-Visited." *Facts, Views & Vision in ObGyn* 5, no. 4 (2013): 292–97.
- Fathalla, M. F. "Incessant Ovulation--a Factor in Ovarian Neoplasia?" *Lancet* 2, no. 7716 (July 17, 1971): 163.
- FDA. "Ltr to Samuel S. Epstein, M.D., RE: Docket Numbers 94P-0420 and FDA-2008-P-0309-0001 /CP," April 1, 2017.
- Fedak, Kristen M., Autumn Bernal, Zachary A. Capshaw, and Sherilyn Gross. "Applying the Bradford Hill Criteria in the 21st Century: How Data Integration Has Changed Causal Inference in Molecular Epidemiology." *Emerging Themes in Epidemiology* 12, no. 14 (2015).
- "Federal Register Vol. 81, No.243, December 19, 2016 FDA Ban on Surgical Gloves." Accessed August 16, 2018.
- Ferguson, Lynnette R. "Chronic Inflammation and Mutagenesis." *Mutation Research* 690, no. 1–2 (August 7, 2010): 3–11.
- Fernandes, José Veríssimo, Ricardo Ney Oliveira Cobucci, Carlos André Nunes Jatobá, Thales Allyrio Araújo de Medeiros Fernandes, Judson Welber Veríssimo de Azevedo, and Josélio Maria Galvão de Araújo. "The Role of the Mediators of Inflammation in Cancer Development." *Pathology & Oncology Research* 21, no. 3 (July 2015): 527–34.
- Ferrante, Daniela, Marinella Bertolotti, Annalisa Todesco, Dario Mirabelli, Benedetto Terracini, and Corrado Magnani. "Cancer Mortality and Incidence of Mesothelioma in a Cohort of Wives of Asbestos Workers in Casale Monferrato, Italy." *Environmental Health Perspectives* 115, no. 10 (October 2007): 1401–5.
- Ferrer, Jaume, Juan F. Montes, Maria A. Villarino, Richard W. Light, and José García-Valero. "Influence of Particle Size on Extrapleural Talc Dissemination after Talc Slurry Pleurodesis." *Chest* 122, no. 3 (September 2002): 1018–27.
- Fields, L., et al. "Gynecologic Cancer." Excerpt. *Clinical Oncology* 2001.
- Fiume, Monice M., Ivan Boyer, Wilma F. Bergfeld, Donald V. Belsito, Ronald A. Hill, Curtis D. Klaassen, Daniel C. Liebler, et al. "Safety Assessment of Talc as Used in Cosmetics." *International Journal of Toxicology* 34, no. 1 suppl (July 1, 2015): 66S-129S.
- Fletcher, Nicole M., Jimmy Belotte, Mohammed G. Saed, Ira Memaj, Michael P. Diamond, Robert T. Morris, and Ghassan M. Saed. "Specific Point Mutations in Key Redox Enzymes Are Associated with Chemoresistance in Epithelial Ovarian Cancer." *Free Radical Biology and Medicine* 102 (2017): 122–32.
- Fletcher, Nicole M., Zhongliang Jiang, Rouba Ali-Fehmi, Nancy K. Levin, Jimmy Belotte, Michael A. Tainsky, Michael P. Diamond, Husam M. Abu-Soud, and Ghassan M. Saed. "Myeloperoxidase and Free Iron Levels: Potential Biomarkers for Early Detection and Prognosis of Ovarian Cancer." *Cancer Biomarkers* 10 (2012 2011): 267–75.
- Fletcher, Nicole, Memaj, Ira, and Saed, Ghassan. "Talcum Powder Enhances Oxidative Stress in Ovarian Cancer Cells." *Reproductive Sciences*, February 28, 2018.
- Fletcher, NM, and GM Saed. "Talcum Powder Enhances Cancer Antigen 125 Levels in Ovarian Cancer Cells." *Presented at the 65th Meeting of the Society for Reproductive Investigation, San Diego, California*, 2018.
- Folkins, Ann K., Elke A. Jarboe, Jonathan L. Hecht, Michael G. Muto, and Christopher P. Crum. "Chapter 24 - Assessing Pelvic Epithelial Cancer Risk and Intercepting Early Malignancy." In *Diagnostic Gynecologic and Obstetric Pathology (Third Edition)*,

- 844–64. Philadelphia: Content Repository, 2018.
- Ford, D., D.F. Easton, M. Stratton, S. Narod, D. Goldgar, P. Devilee, D.T. Bishop, et al. “Genetic Heterogeneity and Penetrance Analysis of the BRCA1 and BRCA2 Genes in Breast Cancer Families.” *The American Journal of Human Genetics* 62, no. 3 (March 1998): 676–89.
- Frank, Czul and Lascano Jorge. “An Uncommon Hazard: Pulmonary Talcosis as a Result of Recurrent Aspiration of Baby Powder.” *Respiratory Medicine CME* No. 4 (2011): 109–111.
- Freedman, Ralph S, Michael Deavers, Jinsong Liu, and Ena Wang. “Peritoneal Inflammation – A Microenvironment for Epithelial Ovarian Cancer (EOC).” *Journal of Translational Medicine* 2, no. 23 (2004).
- Friebel, Tara M., Susan M. Domchek, and Timothy R. Rebbeck. “Modifiers of Cancer Risk in BRCA1 and BRCA2 Mutation Carriers: Systematic Review and Meta-Analysis.” *Journal of the National Cancer Institute* 106, no. 6 (June 2014): dju091.
- Frost, G. “The Latency Period of Mesothelioma among a Cohort of British Asbestos Workers (1978–2005).” *British Journal of Cancer* 109, no. 7 (October 1, 2013): 1965–73.
- Galea, Sandro, and Roger D. Vaughan. “Moving Beyond the Cause Constraint: A Public Health of Consequence, May 2018.” *American Journal of Public Health* 108, no. 5 (May 2018): 602–3.
- Gates, Margaret A., Bernard A. Rosner, Jonathan L. Hecht, and Shelley S. Tworoger. “Risk Factors for Epithelial Ovarian Cancer by Histologic Subtype.” *American Journal of Epidemiology* 171, no. 1 (January 1, 2010): 45–53.
- Gates, Margaret A., Shelley S. Tworoger, Kathryn L. Terry, Linda Titus-Ernstoff, Bernard Rosner, Immaculata De Vivo, Daniel W. Cramer, and Susan E. Hankinson. “Talc Use, Variants of the GSTM1, GSTT1, and NAT2 Genes, and Risk of Epithelial Ovarian Cancer.” *Cancer Epidemiology, Biomarkers & Prevention: A Publication of the American Association for Cancer Research, Cosponsored by the American Society of Preventive Oncology* 17, no. 9 (September 2008): 2436–44.
- Genofre, Eduardo H., Francisco S. Vargas, Milena M. P. Acencio, Leila Antonangelo, Lisete R. Teixeira, and Evaldo Marchi. “Talc Pleurodesis: Evidence of Systemic Inflammatory Response to Small Size Talc Particles.” *Respiratory Medicine* 103, no. 1 (January 2009): 91–97.
- Germani, D., S. Belli, C. Bruno, M. Grignoli, M. Nesti, R. Pirastu, and P. Comba. “Cohort Mortality Study of Women Compensated for Asbestosis in Italy.” *American Journal of Industrial Medicine* 36, no. 1 (July 1999): 129–34.
- Gertig, D. M., D. J. Hunter, D. W. Cramer, G. A. Colditz, F. E. Speizer, W. C. Willett, and S. E. Hankinson. “Prospective Study of Talc Use and Ovarian Cancer.” *Journal of the National Cancer Institute* 92, no. 3 (February 2, 2000): 249–52.
- Ghio, Andrew J., Joleen M. Soukup, Lisa A. Dailey, Judy H. Richards, Jennifer L. Turi, Elizabeth N. Pavlisko, and Victor L. Roggli. “Disruption of Iron Homeostasis in Mesothelial Cells after Talc Pleurodesis.” *American Journal of Respiratory Cell and Molecular Biology* 46, no. 1 (January 1, 2012): 80–86.
- Gibbs, A.E., F.D. Pooley, M. Griffiths, R. Mitha, J.E. Craighead, J.R. Ruttner. “Talc Pneumoconiosis: A Pathologic and Mineralogic Study.” *Human Pathology* 23, No. 12, (December 1992): 1344–1354.
- Gloyne, S. R. “Two Cases of Squamous Carcinoma of the Lung Occurring in Asbestosis.”

- Tubercle* 17 (1935): 5–10.
- Godard, B., W. D. Foulkes, D. Provencher, J. S. Brunet, P. N. Tonin, A. M. Mes-Masson, S. A. Narod, and P. Ghadirian. “Risk Factors for Familial and Sporadic Ovarian Cancer among French Canadians: A Case-Control Study.” *American Journal of Obstetrics and Gynecology* 179, no. 2 (August 1998): 403–10.
- Gondal, M., et al. “Detection of Tox Metals (Lead and Chromium) in Talcum Powder Using Laser Induced Breakdown Spectroscopy.” *Applied Optics* 51, No. 30, (October 2012): 7395–7401.
- Gonzalez, Kelly D., Katie A. Noltner, Carolyn H. Buzin, Dongqing Gu, Cindy Y. Wen-Fong, Vu Q. Nguyen, Jennifer H. Han, et al. “Beyond Li Fraumeni Syndrome: Clinical Characteristics of Families with P53 Germline Mutations.” *Journal of Clinical Oncology: Official Journal of the American Society of Clinical Oncology* 27, no. 8 (March 10, 2009): 1250–56.
- Gonzalez, Nicole L., Katie M. O’Brien, Aimee A. D’Aloisio, Dale P. Sandler, and Clarice R. Weinberg. “Douching, Talc Use, and Risk of Ovarian Cancer.” *Epidemiology (Cambridge, Mass.)* 27, no. 6 (2016): 797–802.
- Goodman, Marc T, Galina Lurie, Pamela J Thompson, Katharine E McDuffie, and Michael E Carney. “Association of Two Common Single-Nucleotide Polymorphisms in the CYP19A1 Locus and Ovarian Cancer Risk.” *Endocrine-Related Cancer* 15, no. 4 (December 2008): 1055–60.
- Gordon, Ronald E., Sean Fitzgerald, and James Millette. “Asbestos in Commercial Cosmetic Talcum Powder as a Cause of Mesothelioma in Women.” *International Journal of Occupational and Environmental Health* 20, no. 4 (October 2014): 318–32.
- Graham, J., and R. Graham. “Ovarian Cancer and Asbestos.” *Environmental Research* 1, no. 2 (October 1967): 115–28.
- Graham, and Jenkins. “Value of Modified Starch as a Substitute for Talc.” *Lancet (London, England)* 1, no. 6708 (March 22, 1952): 590–91.
- Green, A., D. Purdie, C. Bain, V. Siskind, P. Russell, M. Quinn, and B. Ward. “Tubal Sterilisation, Hysterectomy and Decreased Risk of Ovarian Cancer. Survey of Women’s Health Study Group.” *International Journal of Cancer. Journal International Du Cancer* 71, no. 6 (June 11, 1997): 948–51.
- Grivennikov, Sergei I., Florian R. Greten, and Michael Karin. “Immunity, Inflammation, and Cancer.” *Cell* 140, no. 6 (March 19, 2010): 883–99.
- Gross, A. J., and P. H. Berg. “A Meta-Analytical Approach Examining the Potential Relationship between Talc Exposure and Ovarian Cancer.” *Journal of Exposure Analysis and Environmental Epidemiology* 5, no. 2 (June 1995): 181–95.
- Hall, J. M., M. K. Lee, B. Newman, J. E. Morrow, L. A. Anderson, B. Huey, and M. C. King. “Linkage of Early-Onset Familial Breast Cancer to Chromosome 17q21.” *Science (New York, N.Y.)* 250, no. 4988 (December 21, 1990): 1684–89.
- Halme, J., M. G. Hammond, J. F. Hulkka, S. G. Raj, and L. M. Talbert. “Retrograde Menstruation in Healthy Women and in Patients with Endometriosis.” *Obstetrics and Gynecology* 64, no. 2 (August 1984): 151–54.
- Hamilton, T. C., H. Fox, C. H. Buckley, W. J. Henderson, and K. Griffiths. “Effects of Talc on the Rat Ovary.” *British Journal of Experimental Pathology* 65, no. 1 (February 1984): 101–6.
- Hanahan, Douglas and Robert A. Weinberg. “Hallmarks of Cancer: The Next Generation.” *Cell*

- 144, (March 4, 2011): 646–674.
- Hankinson, S. E., D. J. Hunter, G. A. Colditz, W. C. Willett, M. J. Stampfer, B. Rosner, C. H. Hennekens, and F. E. Speizer. “Tubal Ligation, Hysterectomy, and Risk of Ovarian Cancer. A Prospective Study.” *JAMA* 270, no. 23 (December 15, 1993): 2813–18.
- Hannenhalli, Sridhar, and Klaus H. Kaestner. “The Evolution of Fox Genes and Their Role in Development and Disease.” *Nature Reviews. Genetics* 10, no. 4 (April 2009): 233–40.
- Harlow, B. L., D. W. Cramer, D. A. Bell, and W. R. Welch. “Perineal Exposure to Talc and Ovarian Cancer Risk.” *Obstetrics and Gynecology* 80, no. 1 (July 1992): 19–26.
- Harlow, B. L., and P. A. Hartge. “A Review of Perineal Talc Exposure and Risk of Ovarian Cancer.” *Regulatory Toxicology and Pharmacology: RTP* 21, no. 2 (April 1995): 254–60.
- Harlow, B. L., and N. S. Weiss. “A Case-Control Study of Borderline Ovarian Tumors: The Influence of Perineal Exposure to Talc.” *American Journal of Epidemiology* 130, no. 2 (August 1989): 390–94.
- Harper, Amy K, and Ghassan Saed. “Talc Induces a pro-Oxidant State in Normal and Ovarian Cancer Cells through Genetic Point Mutations in Key Redox Enzymes,” Accepted for Presentation at SGO Meeting,” In Press 2019.
- Hartge, P., R. Hoover, L. P. Lesher, and L. McGowan. “Talc and Ovarian Cancer.” *JAMA: The Journal of the American Medical Association* 250, no. 14 (October 14, 1983): 1844.
- Hasselbalch, Hans Carl. “Chronic Inflammation as a Promotor of Mutagenesis in Essential Thrombocythemia, Polycythemia Vera and Myelofibrosis. A Human Inflammation Model for Cancer Development?” *Leukemia Research* 37, no. 2 (February 2013): 214–20.
- Havrilesky, Laura J., Patricia G. Moorman, William J. Lowery, Jennifer M. Gierisch, Remy R. Coeytaux, Rachel Peragallo Urrutia, Michaela Dinan, et al. “Oral Contraceptive Pills as Primary Prevention for Ovarian Cancer: A Systematic Review and Meta-Analysis.” *Obstetrics and Gynecology* 122, no. 1 (July 2013): 139–47.
- Heller, D. S., R. E. Gordon, and N. Katz. “Correlation of Asbestos Fiber Burdens in Fallopian Tubes and Ovarian Tissue.” *American Journal of Obstetrics and Gynecology* 181, no. 2 (August 1999): 346–47.
- Heller, D. S., R. E. Gordon, C. Westhoff, and S. Gerber. “Asbestos Exposure and Ovarian Fiber Burden.” *American Journal of Industrial Medicine* 29, no. 5 (May 1996): 435–39.
- Heller, D. S., C. Westhoff, R. E. Gordon, and N. Katz. “The Relationship between Perineal Cosmetic Talc Usage and Ovarian Talc Particle Burden.” *American Journal of Obstetrics and Gynecology* 174, no. 5 (May 1996): 1507–10.
- Henderson, W. J., T. C. Hamilton, M. S. Baylis, C. G. Pierrepont, and K. Griffiths. “The Demonstration of the Migration of Talc from the Vagina and Posterior Uterus to the Ovary in the Rat.” *Environmental Research* 40, no. 2 (August 1986): 247–50.
- Henderson, W. J., T. C. Hamilton, and K. Griffiths. “Talc in Normal and Malignant Ovarian Tissue.” *The Lancet* (March 3, 1979): 499.
- Henderson, W. J., C. A. Joslin, A. C. Turnbull, and K. Griffiths. “Talc and Carcinoma of the Ovary and Cervix.” *The Journal of Obstetrics and Gynaecology of the British Commonwealth* 78, no. 3 (March 1971): 266–72.
- Hernán, Miguel A. “The C-Word: Scientific Euphemisms Do Not Improve Causal Inference From Observational Data.” *American Journal of Public Health* 108, no. 5 (May 2018): 616–19.
- Hill, Austin Bradford. “The Environment and Disease: Association or Causation?” *Proceedings*

- of the Royal Society of Medicine* 58, no. 5 (May 1965): 295–300.
- Hillegass, Jedd M., Arti Shukla, Maximilian B. MacPherson, Jeffrey P. Bond, Chad Steele, and Brooke T. Mossman. “Utilization of Gene Profiling and Proteomics to Determine Mineral Pathogenicity in a Human Mesothelial Cell Line (LP9/TERT-1).” *Journal of Toxicology and Environmental Health. Part A* 73, no. 5 (January 2010): 423–36.
- Hollinger, Mannfred. “Pulmonary Toxicity of Inhaled and Intravenous Talc.” *Toxicology Letters* 52 (1990): 121–127.
- Horowitz, Neil S., Austin Miller, Bunja Rungruang, Scott D. Richard, Noah Rodriguez, Michael A. Bookman, Chad A. Hamilton, Thomas C. Krivak, and G. Larry Maxwell. “Does Aggressive Surgery Improve Outcomes? Interaction between Preoperative Disease Burden and Complex Surgery in Patients with Advanced-Stage Ovarian Cancer: An Analysis of GOG 182.” *Journal of Clinical Oncology: Official Journal of the American Society of Clinical Oncology* 33, no. 8 (March 10, 2015): 937–43.
- Houghton, Serena C., Katherine W. Reeves, Susan E. Hankinson, Lori Crawford, Dorothy Lane, Jean Wactawski-Wende, Cynthia A. Thomson, Judith K. Ockene, and Susan R. Sturgeon. “Perineal Powder Use and Risk of Ovarian Cancer.” *Journal of the National Cancer Institute* 106, no. 9 (September 2014).
- Huncharek, Michael, J. F. Geschwind, and Bruce Kupelnick. “Perineal Application of Cosmetic Talc and Risk of Invasive Epithelial Ovarian Cancer: A Meta-Analysis of 11,933 Subjects from Sixteen Observational Studies.” *Anticancer Research* 23, no. 2C (April 2003): 1955–60.
- Huncharek, Michael, Joshua Muscat, Adedayo Onitilo, and Bruce Kupelnick. “Use of Cosmetic Talc on Contraceptive Diaphragms and Risk of Ovarian Cancer: A Meta-Analysis of Nine Observational Studies.” *European Journal of Cancer Prevention: The Official Journal of the European Cancer Prevention Organisation (ECP)* 16, no. 5 (October 2007): 422–29.
- Hunn, Jessica, and Gustavo C. Rodriguez. “Ovarian Cancer: Etiology, Risk Factors, and Epidemiology.” *Clinical Obstetrics and Gynecology* 55, no. 1 (March 2012): 3–23.
- IARC. “Mechanisms of Fibre Carcinogens.” *IARC Scientific Publications*. No. 140. 1996.
- IARC. “IARC Monographs on the Evaluation of Carcinogenic Risks to Humans – IARC: Asbestos,” 1977.
- IARC. “IARC Monographs on the Evaluation of Carcinogenic Risks to Humans, Volume 58. Beryllium, Cadmium, Mercury, and Exposures in the Glass Manufacturing Industry,” 1993.
- IARC. “IARC Monographs on the Evaluation of Carcinogenic Risks to Humans Volume 93 Carbon Black, Titanium Dioxide, and Talc.” *IARC Monographs on the Evaluation of Carcinogenic Risks to Humans / World Health Organization, International Agency for Research on Cancer* 93 (2010): 1–413.
- IARC. “IARC Monographs on the Evaluation of Carcinogenic Risks to Humans: Volume 100C,” 2012.
- IARC. “IARC Monographs on the Evaluation of the Carcinogenic Risk of Chemicals to Humans: Silica and Some Silicates.” IARC, 1987.
- IARC. “IARC Monographs on the Evaluation of the Carcinogenic Risks to Humans. Overall Evaluations of Carcinogenicity: An Updating of IARC Monographs Volumes 1-42. Supplement 7,” 1987.
- IARC, International Agency for Research on Cancer, and World Health Organization, eds.

- Carbon Black, Titanium Dioxide, and Talc.* IARC Monographs on the Evaluation of Carcinogenic Risks to Humans, v. 93. Lyon, France: Geneva: International Agency for Research on Cancer; Distributed by WHO Press, 2010.
- “Inflammation: A Hidden Path to Breaking the Spell of Ovarian Cancer.” *Cell Cycle* 8, no. 19 (2009): 3107–11.
- Institute of Medicine (US) Committee on Asbestos: Selected Health Effects. *Asbestos: Selected Cancers*. The National Academies Collection: Reports Funded by National Institutes of Health. Washington (DC): National Academies Press (US), 2006.
- Isaacs, Claudine, and Beth N Peshkin. “Management of Patients at High Risk for Breast and Ovarian Cancer.” *UpToDate*, 2018.
- Iturralde, M., and P. F. Venter. “Hysterosalpingo-Radionuclide Scintigraphy (HERS).” *Seminars in Nuclear Medicine* 11, no. 4 (October 1981): 301–14.
- J. Lightfoot, G.A. Kingston, and F.D. Pooley. “An Examination of Italian Mine Samples and Relevant Powders,” 1972.
- Jaiswal, M., N. F. LaRusso, L. J. Burgart, and G. J. Gores. “Inflammatory Cytokines Induce DNA Damage and Inhibit DNA Repair in Cholangiocarcinoma Cells by a Nitric Oxide-Dependent Mechanism.” *Cancer Research* 60, no. 1 (January 1, 2000): 184–90.
- “JANSSEN-000056 P-23 (Pltf_MISC_00000321) Ortho Diaphragm Information,” n.d.
- Jasuja, S. et al. “Cosmetic Talc-Related Pulmonary Granulomatosis.” *Journal of Investigative Medicine High Impact Case Reports* (July-September 2017): 1–4.
- Jaurand, M. C. “Mechanisms of Fiber-Induced Genotoxicity.” *Environmental Health Perspectives* 105 Suppl 5 (September 1997): 1073–84.
- Jaurand, M. C. “Particulate-State Carcinogenesis: A Survey of Recent Studies on the Mechanisms of Action of Fibres.” *IARC Scientific Publications*, no. 90 (1989): 54–73.
- Jaurand, MC. “Mechanisms of Fibre Genotoxicity.” In *Mechanisms in Fibre Carcinogenesis*. New York: Plenum Press, 1991.
- Jervis, Sarah, Honglin Song, Andrew Lee, Ed Dicks, Jonathan Tyrer, Patricia Harrington, Douglas F. Easton, Ian J. Jacobs, Paul P. D. Pharoah, and Antonis C. Antoniou. “Ovarian Cancer Familial Relative Risks by Tumour Subtypes and by Known Ovarian Cancer Genetic Susceptibility Variants.” *Journal of Medical Genetics* 51, no. 2 (February 2014): 108–13.
- Jia, D, Y Nagaoka, S Orsulic, and M Katsumata. “Inflammation Is a Key Contributor to Ovarian Cancer Cell Seeding.” *Scientific Reports* 8, no. 12394 (August 17, 2018).
- Jiang, Zhongliang, Nicole M. Fletcher, Rouba Ali-Fehmi, Michael P. Diamond, Husam M. Abu-Soud, Adnan R. Munkarah, and Ghassan M. Saed. “Modulation of Redox Signaling Promotes Apoptosis in Epithelial Ovarian Cancer Cells.” *Gynecologic Oncology* 122, no. 2 (August 2011): 418–23.
- John M. DeSesso. “Exponent Talc Defense Presentation Toxic Talc?” January 18, 2018.
- Jones, Richard E., and Kristin H. Lopez. “Human Reproductive Biology - 4th Edition Chapter 9 - Gamete Transport and Fertilization.” In *Human Reproductive Biology*, Third., 159–73. San Diego: Academic Press, 2006.
- Jordan, SJ, KL Cushing-Haugen, KG Wicklund, JA Doherty, and MA Rossing. “Breast Feeding and Risk of Epithelial Ovarian Cancer.” *Cancer Causes & Control: CCC* 23, no. 6 (June 2012): 919–27.
- Jordan, Susan J., Victor Siskind, Adèle C Green, David C. Whiteman, and Penelope M. Webb. “Breastfeeding and Risk of Epithelial Ovarian Cancer.” *Cancer Causes & Control: CCC*

- 21, no. 1 (January 2010): 109–16.
- Jordan, Susan J., David C. Whiteman, David M. Purdie, Adèle C. Green, and Penelope M. Webb. “Does Smoking Increase Risk of Ovarian Cancer? A Systematic Review.” *Gynecologic Oncology* 103, no. 3 (December 2006): 1122–29.
- Jurinski, Joseph B., and J. Donald Rimstidt. “Biodurability of Talc.” *American Mineralogist* 86, no. 4 (April 2001): 392–99.
- Kane, AB, P Boffetta, R Saracci, and JD Wilbourn. “Mechanisms of Fibre Carcinogenesis.” IARC, 1996.
- Kang, N., D. Griffin, and H. Ellis. “The Pathological Effects of Glove and Condom Dusting Powders.” *Journal of Applied Toxicology* 12, no. 6 (December 1992): 443–49.
- Kanterman, J., Moshe Sade-Feldman, Michal Baniyash. “New Insights into Chronic Inflammation-Induced Immunosuppression.” *Seminars in Cancer Biology* 22 (2012): 307–318.
- Karageorgi, Stalo, Margaret A. Gates, Susan E. Hankinson, and Immaculata De Vivo. “Perineal Use of Talcum Powder and Endometrial Cancer Risk.” *Cancer Epidemiology, Biomarkers & Prevention: A Publication of the American Association for Cancer Research, Cosponsored by the American Society of Preventive Oncology* 19, no. 5 (May 2010): 1269–75.
- Kasper, C. S., and P. J. Chandler. “Possible Morbidity in Women from Talc on Condoms.” *JAMA: The Journal of the American Medical Association* 273, no. 11 (March 15, 1995): 846–47.
- Kauff, Noah D., Nandita Mitra, Mark E. Robson, Karen E. Hurley, Shaokun Chuai, Deborah Goldfrank, Eve Wadsworth, et al. “Risk of Ovarian Cancer in BRCA1 and BRCA2 Mutation-Negative Hereditary Breast Cancer Families.” *Journal of the National Cancer Institute* 97, no. 18 (September 21, 2005): 1382–84.
- Keal, E.E. “Asbestosis and Abdominal Neoplasms.” *The Lancet* (December 3, 1960): 1211–1260.
- Keskin, Nadi, Yasemin Aktan Teksen, Esra Gürlek Ongun, Yusuf Ozay, and Halil Saygili. “Does Long-Term Talc Exposure Have a Carcinogenic Effect on the Female Genital System of Rats? An Experimental Pilot Study.” *Archives of Gynecology and Obstetrics* 280, no. 6 (December 2009): 925–31.
- Khan, Mohd Imran, AmoghA. Sahasrabuddhe, Govil Patil, Mohd Javed Akhtar, Mohd Ashquin, and Iqbal Ahmad. “Nano-Talc Stabilizes TNF- α mRNA in Human Macrophages.” *Journal of Biomedical Nanotechnology* 7, no. 1 (January 1, 2011): 112–13.
- King, HM. “Talc: The Softest Mineral.”
- King, Talmadge. “Asbestos-Related Pleuropulmonary Disease.” Edited by Kevin Flaherty. *UpToDate*, 2018.
- Kiraly, Orsolya, Guanyu Gong, Werner Olipitz, Sureshkumar Muthupalani, and Bevin P. Engelward. “Inflammation-Induced Cell Proliferation Potentiates DNA Damage-Induced Mutations In Vivo.” *PLoS Genetics*, February 3, 2015.
- Kissler, Stefan, Ernst Siebzehnruedl, Joachim Kohl, Anja Mueller, Nadja Hamscho, Regine Gaetje, Andre Ahr, Achim Rody, and Manfred Kaufmann. “Uterine Contractility and Directed Sperm Transport Assessed by Hysterosalpingoscopy (HSSG) and Intrauterine Pressure (IUP) Measurement.” *Acta Obstetricia Et Gynecologica Scandinavica* 83, no. 4 (April 2004): 369–74.
- Klampfer, Lidija. “Cytokines, Inflammation and Colon Cancer.” *Current Cancer Drug Targets*

- 11, no. 4 (May 2011): 451–64.
- Knudson, A. G. “Mutation and Cancer: Statistical Study of Retinoblastoma.” *Proceedings of the National Academy of Sciences of the United States of America* 68, no. 4 (April 1971): 820–23.
- Kunz, G., D. Beil, H. Deiniger, A. Einspanier, G. Mall, and G. Leyendecker. “The Uterine Peristaltic Pump. Normal and Impeded Sperm Transport within the Female Genital Tract.” *Advances in Experimental Medicine and Biology* 424 (1997): 267–77.
- Kurman, Robert J., and Ie-Ming Shih. “Molecular Pathogenesis and Extraovarian Origin of Epithelial Ovarian Cancer. Shifting the Paradigm.” *Human Pathology* 42, no. 7 (July 2011): 918–31.
- Kurman, Robert J. “The Dualistic Model of Ovarian Carcinogenesis.” *The American Journal of Pathology* 186, no. 4 (April 1, 2016): 733–47.
- Kurman, Robert J., “The Origin and Pathogenesis of Epithelial Ovarian Cancer: A Proposed Unifying Theory.” *The American Journal of Surgical Pathology* 34, no. 3 (March 2010): 433–43.
- Kurta, Michelle L., Kirsten B. Moysich, Joel L. Weissfeld, Ada O. Youk, Clareann H. Bunker, Robert P. Edwards, Francesmary Modugno, Roberta B. Ness, and Brenda Diergaarde. “Use of Fertility Drugs and Risk of Ovarian Cancer: Results from a US-Based Case-Control Study.” *Cancer Epidemiology, Biomarkers & Prevention: A Publication of the American Association for Cancer Research, Cosponsored by the American Society of Preventive Oncology* 21, no. 8 (August 2012): 1282–92.
- La Vecchia. “Ovarian Cancer: Epidemiology and Risk Factors.” *European Journal of Cancer Prevention* 26 (2017): 55–62.
- Lambert, C., et al. “A Case-Control Study of Mesothelioma in Minnesota Iron Ore (Taconite) Miners.” *Occup Environ Med* 73 (2016):103–109.
- Lancaster, Johnathan M., C. Bethan Powell, Lee-may Chen, and Debra L. Richardson. “Society of Gynecologic Oncology Statement on Risk Assessment for Inherited Gynecologic Cancer Predispositions.” *Gynecologic Oncology* 136, no. 1 (January 2015): 3–7.
- Landen, Charles N., Michael J. Birrer, and Anil K. Sood. “Early Events in the Pathogenesis of Epithelial Ovarian Cancer.” *Journal of Clinical Oncology: Official Journal of the American Society of Clinical Oncology* 26, no. 6 (February 20, 2008): 995–1005.
- Langseth, H., S. E. Hankinson, J. Siemiatycki, and E. Weiderpass. “Perineal Use of Talc and Risk of Ovarian Cancer.” *Journal of Epidemiology and Community Health* 62, no. 4 (April 2008): 358–60.
- Langseth, H., B.V. Johansen, J.M. Nesland, and K. Kjaerheim. “Asbestos Fibers in Ovarian Tissue from Norwegian Pulp and Paper Workers.” *International Journal of Gynecological Cancer* 17, no. 1 (January 2007): 44–49.
- Langseth, Hilde, and Kristina Kjaerheim. “Ovarian Cancer and Occupational Exposure among Pulp and Paper Employees in Norway.” *Scandinavian Journal of Work, Environment & Health* 30, no. 5 (October 2004): 356–61.
- Lanphear, B. P., and C. R. Buncher. “Latent Period for Malignant Mesothelioma of Occupational Origin.” *Journal of Occupational Medicine.: Official Publication of the Industrial Medical Association* 34, no. 7 (July 1992): 718–21.
- Lee, Jennifer S., Esther M. John, Valerie McGuire, Anna Felberg, Kimberly L. Ostrow, Richard A. DiCioccio, Frederick P. Li, Alexander Miron, Dee W. West, and Alice S. Whittemore. “Breast and Ovarian Cancer in Relatives of Cancer Patients, with and without BRCA

- Mutations.” *Cancer Epidemiology, Biomarkers & Prevention: A Publication of the American Association for Cancer Research, Cosponsored by the American Society of Preventive Oncology* 15, no. 2 (February 2006): 359–63.
- Leikauf, George. “Toxic Responses of the Respiratory System.” Chapter 15. 2013.
- Levanon, Keren, Christopher Crum, and Ronny Drapkin. “New Insights into the Pathogenesis of Serous Ovarian Cancer and Its Clinical Impact.” *Journal of Clinical Oncology* 26, no. 32 (November 10, 2008): 5284–93.
- Levy-Lahad, E., and E. Friedman. “Cancer Risks among BRCA1 and BRCA2 Mutation Carriers.” *British Journal of Cancer* 96, no. 1 (January 15, 2007): 11–15.
- Levy, Stuart. “Pulmonary Reactions to Other Occupational Dusts and Fumes.” *Occupational Medicine*. 3rd Edition. Mosby. 1994.
- Lin, Hui-Wen, Ying-Yueh Tu, Shiying Yu Lin, Wei-Ju Su, Wei Li Lin, Wei Zer Lin, Shen-Chi Wu, and Yuen-Liang Lai. “Risk of Ovarian Cancer in Women with Pelvic Inflammatory Disease: A Population-Based Study.” *The Lancet. Oncology* 12, no. 9 (September 2011): 900–904.
- Liou, Geou-Yarh, and Peter Storz. “Reactive Oxygen Species in Cancer.” *Free Radical Research* 44, no. 5 (May 2010): 476–96.
- Liu, D. T., and A. Hitchcock. “Endometriosis: Its Association with Retrograde Menstruation, Dysmenorrhoea and Tubal Pathology.” *British Journal of Obstetrics and Gynaecology* 93, no. 8 (August 1986): 859–62.
- Lo-Ciganic, Wei-Hsuan, Janice C. Zgibor, Clareann H. Bunker, Kirsten B. Moysich, Robert P. Edwards, and Roberta B. Ness. “Aspirin, Nonaspirin Nonsteroidal Anti-Inflammatory Drugs, or Acetaminophen and Risk of Ovarian Cancer.” *Epidemiology (Cambridge, Mass.)* 23, no. 2 (March 2012): 311–19.
- Lockey, J. E. “Nonasbestos Fibrous Minerals.” *Clinics in Chest Medicine* 2, no. 2 (May 1981): 203–18.
- Longo, D. L., and R. C. Young. “Cosmetic Talc and Ovarian Cancer.” *Lancet* 2, no. 8138 (August 18, 1979): 349–51.
- Luan, Nan-Nan, Qi-Jun Wu, Ting-Ting Gong, Emily Vogtmann, Yong-Lai Wang, and Bei Lin. “Breastfeeding and Ovarian Cancer Risk: A Meta-Analysis of Epidemiologic Studies.” *The American Journal of Clinical Nutrition* 98, no. 4 (October 2013): 1020–31.
- Lundin, Eva, Laure Dossus, Tess Clendenen, Vittorio Krogh, Kjell Grankvist, Marianne Wulff, Sabina Sieri, et al. “C-Reactive Protein and Ovarian Cancer: A Prospective Study Nested in Three Cohorts (Sweden, USA, Italy).” *Cancer Causes & Control: CCC* 20, no. 7 (September 2009): 1151–59.
- Madsen, Cecilie, Louise Baandrup, Christian Dehlendorff, and Susanne K. Kjaer. “Tubal Ligation and Salpingectomy and the Risk of Epithelial Ovarian Cancer and Borderline Ovarian Tumors: A Nationwide Case-Control Study.” *Acta Obstetricia Et Gynecologica Scandinavica* 94, no. 1 (January 2015): 86–94.
- Magnani, C., D. Ferrante, F. Barone-Adesi, M. Bertolotti, A. Todesco, D. Mirabelli, and B. Terracini. “Cancer Risk after Cessation of Asbestos Exposure: A Cohort Study of Italian Asbestos Cement Workers.” *Occupational and Environmental Medicine* 65, no. 3 (March 2008): 164–70.
- Mäki-Nevala, Satu, Virinder Kaur Sarhadi, Aija Knuutila, Ilari Scheinin, Pekka Ellonen, Sonja Lagström, Mikko Rönty, et al. “Driver Gene and Novel Mutations in Asbestos-Exposed

- Lung Adenocarcinoma and Malignant Mesothelioma Detected by Exome Sequencing.” *Lung* 194, no. 1 (February 2016): 125–35.
- Mallen, Adrienne R., Mary K. Townsend, and Shelley S. Tworoger. “Risk Factors for Ovarian Carcinoma.” *Hematology/Oncology Clinics of North America*, September 2018.
- Mandel, J., et al. “A Review of Mortality Associated with Elongate Mineral Particle (EMP) Exposure in Occupational Epidemiology Studies of Gold, Talc, and Taconite Mining.” *American Journal of Industrial Medicine* 59 (2016): 1047-1060.
- Mannino, David M. “Cigarette Smoking and Other Possible Risk Factors for Lung Cancer.” *UpToDate*, 2018.
- Mattenkrott, M. “Asbestos in Talc Powders and Soapstone – The Present State.” *Gefahrstoffe-Reinhalt. Luft* 67 No. 7/8 (2007): 287-291.
- McCullough, Marie. “Condom Makers Stop Using Talc.” *Asbury Park Press*. January 16, 1996.
- McCullough, Marie. “Women’s Health Concerns Prompt Condom Makers to Stop Using Talc.” *Jersey Journal*. April 17, 1996, City Edition.
- McLaughlin-Drubin, Margaret E., and Karl Munger. “Viruses Associated with Human Cancer.” *Biochimica et Biophysica Acta* 1782, no. 3 (March 2008): 127–50.
- McLemore, Miaskowski, Chen Aouizerat, and Dodd. “Epidemiological and Genetic Factors Associated With Ovarian Cancer.” *Cancer Nursing* 32, no. 4 (2009): 281–88.
- Melaiu, Ombretta, Federica Gemignani, and Stefano Landi. “The Genetic Susceptibility in the Development of Malignant Pleural Mesothelioma.” *Journal of Thoracic Disease* 10, no. Suppl 2 (January 2018): S246–52.
- Meng, Qingsong, Weixue Sun, John Jiang, Nicole M. Fletcher, Michael P. Diamond, and Ghassan M. Saed. “Identification of Common Mechanisms between Endometriosis and Ovarian Cancer.” *Journal of Assisted Reproduction and Genetics* 28 (2011): 917–23.
- Merritt, Melissa A., Adèle C. Green, Christina M. Nagle, Penelope M. Webb, Australian Cancer Study (Ovarian Cancer), and Australian Ovarian Cancer Study Group. “Talcum Powder, Chronic Pelvic Inflammation and NSAIDs in Relation to Risk of Epithelial Ovarian Cancer.” *International Journal of Cancer. Journal International Du Cancer* 122, no. 1 (January 1, 2008): 170–76.
- Miller, Diane M., and Jessica N. McAlpine. “Opportunistic Salpingectomy for Ovarian, Fallopian Tubal, and Peritoneal Carcinoma Risk Reduction.” *UpToDate*, 2018.
- Mills, Paul K., Deborah G. Riordan, Rosemary D. Cress, and Heather A. Young. “Perineal Talc Exposure and Epithelial Ovarian Cancer Risk in the Central Valley of California.” *International Journal of Cancer. Journal International Du Cancer* 112, no. 3 (November 10, 2004): 458–64.
- Milne, R. L., and A. C. Antoniou. “Genetic Modifiers of Cancer Risk for BRCA1 and BRCA2 Mutation Carriers.” *Annals of Oncology: Official Journal of the European Society for Medical Oncology* 22 Suppl 1 (January 2011): i11-17.
- Milne, Roger L., and Antonis C. Antoniou. “Modifiers of Breast and Ovarian Cancer Risks for BRCA1 and BRCA2 Mutation Carriers.” *Endocrine-Related Cancer* 23, no. 10 (2016): T69-84.
- Moller, Danielsen, and Roursgaard Jantzen. “Oxidatively Damaged DNA in Animals Exposed to Particles.” *Critical Reviews in Toxicology* 43, no. 2 (2013): 96–118.
- Moon, Min Chaul, Jung Duck Park, Byung Soon Choi, So Young Park, Dong Won Kim, Yong Hyun Chung, Naomi Hisanaga, and Il Je Yu. “Risk Assessment of Baby Powder Exposure through Inhalation.” *Toxicological Research* 27, no. 3 (September 2011):

137–41.

- Moorman, Patricia G. “Scientific Review of the Epidemiologic Evidence on Talc Use and Ovarian Cancer,” February 2018.
- Moorman, Patricia G., Rachel T. Palmieri, Lucy Akushevich, Andrew Berchuck, and Joellen M. Schildkraut. “Ovarian Cancer Risk Factors in African-American and White Women.” *American Journal of Epidemiology* 170, no. 5 (September 1, 2009): 598–606.
- Moskowitz, Robert. “Talc Pneumoconiosis: A Treated Case.” *Chest* 58, No. 1 (July 1970): 37–41.
- Mostafa, S. A., C. B. Bargeron, R. W. Flower, N. B. Rosenshein, T. H. Parmley, and J. D. Woodruff. “Foreign Body Granulomas in Normal Ovaries.” *Obstetrics and Gynecology* 66, no. 5 (November 1985): 701–2.
- Murphy, Megan A., Britton Trabert, Hannah P. Yang, Yikyung Park, Louise A. Brinton, Patricia Hartge, Mark E. Sherman, Albert Hollenbeck, and Nicolas Wentzensen. “Non-Steroidal Anti-Inflammatory Drug Use and Ovarian Cancer Risk: Findings from the NIH-AARP Diet and Health Study and Systematic Review.” *Cancer Causes & Control: CCC* 23, no. 11 (November 2012): 1839–52.
- Muscat, J. E., and M. S. Huncharek. “Causation and Disease: Biomedical Science in Toxic Tort Litigation.” *Journal of Occupational Medicine.: Official Publication of the Industrial Medical Association* 31, no. 12 (December 1989): 997–1002.
- Nadler, Diana L., and Igor G. Zurbenko. “Estimating Cancer Latency Times Using a Weibull Model,” 2014, 8.
- Nam, Key and Douglas R. Gracey. “Pulmonary Talcosis from Cosmetic Talcum Powder.” *JAMA* 221, No. 5 (1972): 492–493.
- Narod, Steven A. “Talc and Ovarian Cancer.” *Gynecologic Oncology* 141, no. 3 (2016): 410–12.
- National Cancer Institute, Surveillance, Epidemiology, and End Results Program. “Cancer Stat Facts: Ovarian Cancer,” 2018.
- National Cancer Institute. “NCI Dictionary of Cancer Terms: Pleurodesis.”
- “National Toxicology Program (NTP) Technical Report (NTP TR 421) on the Toxicology and Carcinogenesis Studies of Talc in F344/N Rats and B6C3F1 Mice.” National Institutes of Health, 1993.
- Nelson, Heather H., and Karl T. Kelsey. “The Molecular Epidemiology of Asbestos and Tobacco in Lung Cancer.” *Oncogene* 21, no. 48 (October 21, 2002): 7284–88.
- Ness, R. B., and C. Cottreau. “Possible Role of Ovarian Epithelial Inflammation in Ovarian Cancer.” *JNCI Journal of the National Cancer Institute* 91, no. 17 (September 1, 1999): 1459–67.
- Ness, R. B., J. A. Grisso, C. Cottreau, J. Klapper, R. Vergona, J. E. Wheeler, M. Morgan, and J. J. Schlesselman. “Factors Related to Inflammation of the Ovarian Epithelium and Risk of Ovarian Cancer.” *Epidemiology (Cambridge, Mass.)* 11, no. 2 (March 2000): 111–17.
- Ness, Roberta B., Daniel W. Cramer, Marc T. Goodman, Susanne Krüger Kjaer, Kathy Mallin, Berit Jul Mosgaard, David M. Purdie, Harvey A. Risch, Ronald Vergona, and Anna H. Wu. “Infertility, Fertility Drugs, and Ovarian Cancer: A Pooled Analysis of Case-Control Studies.” *American Journal of Epidemiology* 155, no. 3 (February 1, 2002): 217–24.
- Neutra, Raymond Richard, Carl F. Cranor, and David Gee. “The Use and Misuse of Bradford Hill in U.S. Tort Law.” *Jurimetrics J.*, 2018, 127–62.
- Newhouse, M. L., G. Berry, J. C. Wagner, and M. E. Turok. “A Study of the Mortality of Female Asbestos Workers.” *British Journal of Industrial Medicine* 29, no. 2 (April 1972): 134–41.

- Nick, Alpa M., Robert L. Coleman, Pedro T. Ramirez, and Anil K. Sood. "A Framework for a Personalized Surgical Approach to Ovarian Cancer." *Nature Reviews. Clinical Oncology* 12, no. 4 (April 2015): 239–45.
- NIOSH. "Asbestos Fibers and Other Elongated Mineral Particles: State of the Science and Roadmap for Research (Revised Draft)," January 2009.
- NIOSH. "Fiber Exposure during Use of Baby Powders, Report No. IWS-36-6.," July 1972.
- NIOSH. 2011 Current Intelligence Bulletin No. 62," 2011.
- NIOSH. "Pocket Guide to Chemical Hazards: Asbestos." Publication No. 2005-149 (September 2007).
- Norquist, Barbara M., Maria I. Harrell, Mark F. Brady, Tom Walsh, Ming K. Lee, Suleyman Gulsuner, Sarah S. Bernards, et al. "Inherited Mutations in Women With Ovarian Carcinoma." *JAMA Oncology* 2, no. 4 (April 2016): 482–90.
- NTP. "Report on Carcinogens: Asbestos." 14th Edition. 2016.
- NTP. "NTP Technical Report on the Toxicology and Carcinogenesis Studies of Benzophenone (CAS No. 119-61-9) In F344/N Rats and B6C3F1 Mice," February 2006.
- NTP. "NTP Toxicology and Carcinogenesis Studies of Talc (CAS No. 14807-96-6)(NonAsbestiform) in F344/N.Rats and B6C3Fl Mice (Inhalation Studies)," 1993.
- Oberdörster, Günter, Eva Oberdörster, and Jan Oberdörster. "Nanotoxicology: An Emerging Discipline Evolving from Studies of Ultrafine Particles." *Environmental Health Perspectives* 113, no. 7 (July 2005): 823–39. <https://doi.org/10.1289/ehp.7339>.
- Okada, Futoshi. "Beyond Foreign-Body-Induced Carcinogenesis: Impact of Reactive Oxygen Species Derived from Inflammatory Cells in Tumorigenic Conversion and Tumor Progression." *International Journal of Cancer* 121, no. 11 (December 1, 2007): 2364–72.
- Paoletti, L., S. Caiazza, G. Donelli, and F. Pocchiari. "Evaluation by Electron Microscopy Techniques of Asbestos Contamination in Industrial, Cosmetic, and Pharmaceutical Talcs." *Regulatory Toxicology and Pharmacology: RTP* 4, no. 3 (September 1984): 222–35.
- Park, Hyo K., Joellen M. Schildkraut, Anthony J. Alberg, Elisa V. Bandera, Jill S. Barnholtz-Sloan, Melissa Bondy, Sydnee Crankshaw, et al. "Benign Gynecologic Conditions Are Associated with Ovarian Cancer Risk in African-American Women: A Case–Control Study." *Cancer Causes & Control*, September 29, 2018.
- Parmar, M. K. B., J. A. Ledermann, N. Colombo, A. du Bois, J.-F. Delaloye, G. B. Kristensen, S. Wheeler, et al. "Paclitaxel plus Platinum-Based Chemotherapy versus Conventional Platinum-Based Chemotherapy in Women with Relapsed Ovarian Cancer: The ICON4/AGO-OVAR-2.2 Trial." *Lancet (London, England)* 361, no. 9375 (June 21, 2003): 2099–2106.
- Parmley, T. H., and J. D. Woodruff. "The Ovarian Mesothelioma." *American Journal of Obstetrics and Gynecology* 120, no. 2 (September 15, 1974): 234–41.
- Pathology of Asbestos-Associated Diseases, 2011.
- Pearce, Celeste Leigh, Claire Templeman, Mary Anne Rossing, Alice Lee, Aimee M Near, Penelope M Webb, Christina M Nagle, et al. "Association between Endometriosis and Risk of Histological Subtypes of Ovarian Cancer: A Pooled Analysis of Case–Control Studies." *The Lancet Oncology* 13, no. 4 (April 2012): 385–94. [https://doi.org/10.1016/S1470-2045\(11\)70404-1](https://doi.org/10.1016/S1470-2045(11)70404-1).
- Pejovic, Tanja, and Farr Nezhat. "Missing Link: Inflammation and Ovarian Cancer." *The Lancet*.

- Oncology* 12, no. 9 (September 2011): 833–34.
- Pelling, D., and J. G. Evans. “Long-Term Peritoneal Tissue Response in Rats to Mould-Release Agents and Lubricant Powder Used on Surgeons’ Gloves.” *Food and Chemical Toxicology: An International Journal Published for the British Industrial Biological Research Association* 24, no. 5 (May 1986): 425–30.
- Penninkilampi, Ross, and Guy D. Eslick. “Perineal Talc Use and Ovarian Cancer: A Systematic Review and Meta-Analysis.” *Epidemiology (Cambridge, Mass.)* 29, no. 1 (January 2018): 41–49.
- Peshkin, B., et al. “Genetic Counseling and Testing for Hereditary Breast and Ovarian Cancer - UpToDate,” 2018.
https://www.uptodate.com/contents/genetic-counseling-and-testing-for-hereditary-breast-and-ovarian-cancer?search=Genetic%20counseling%20and%20testing%20for%20hereditary%20breast%20and%20ovarian%20cancer&source=search_result&selectedTitle=1~150&usage_type=default&display_rank=1.
- Peshkin, B. “Overview of Hereditary Breast and Ovarian Cancer Syndromes - UpToDate,” 2018.
https://www.uptodate.com/contents/overview-of-hereditary-breast-and-ovarian-cancer-syndromes?search=Overview%20of%20hereditary%20breast%20and%20ovarian%20cancer%20syndromes&source=search_result&selectedTitle=1~150&usage_type=default&display_rank=1.
- Peshkin, B. “Prevalence of BRCA1 and BRCA2 Mutations and Associated Cancer Risks - UpToDate,” 2018.
https://www.uptodate.com/contents/prevalence-of-brca1-and-brca2-mutations-and-associated-cancer-risks?search=prevalence-of-brca1-and-brca2-mu%20%20A6search_result%26selectedTitle%3D1~73%26usage_type%3Ddefault%26display_rank%3D1&source=search_result&selectedTitle=2~150&usage_type=default&display_rank=2.
- Phillips, J. C., P. J. Young, K. Hardy, and S. D. Gangolfi. “Studies on the Absorption and Disposition of 3H-Labelled Talc in the Rat, Mouse, Guinea-Pig and Rabbit.” *Food and Cosmetics Toxicology* 16, no. 2 (April 1978): 161–63.
- Pira, E, C Pelucchi, L Buffoni, A Palmas, M Turbiglio, E Negri, P G Piolatto, and C La Vecchia. “Cancer Mortality in a Cohort of Asbestos Textile Workers.” *British Journal of Cancer* 92, no. 3 (February 2005): 580–86.
- Pira, Enrico, Canzio Romano, Francesco S. Violante, Andrea Farioli, Giovanna Spatari, Carlo La Vecchia, and Paolo Boffetta. “Updated Mortality Study of a Cohort of Asbestos Textile Workers.” *Cancer Medicine* 5, no. 9 (2016): 2623–28.
- Porro, F. W., and N. M. Levine. “Pathology of Talc Pneumoconiosis with Report of an Autopsy.” *Northern New York Medical Journal* 3 (April 1946): 23–25.
- Pott, R., and K. H. Friedrichs. “Tumors in Rats Following i.p. Injection of Fiberform Dusts.” *Naturwissenschaften* 59 (n.d.): 318–24.
- Prat, Jaime, and FIGO Committee on Gynecologic Oncology. “Abridged Republication of FIGO’s Staging Classification for Cancer of the Ovary, Fallopian Tube, and Peritoneum.” *Cancer* 121, no. 19 (October 1, 2015): 3452–54.
- Pukkala, Eero, Jan Ivar Martinsen, Elsebeth Lynge, Holmfridur Kolbrun Gunnarsdottir, Pär Sparén, Laufey Tryggvadottir, Elisabete Weiderpass, and Kristina Kjaerheim. “Occupation and Cancer - Follow-up of 15 Million People in Five Nordic Countries.” *Acta Oncologica (Stockholm, Sweden)* 48, no. 5 (2009): 646–790.
- Purdie, D., A. Green, C. Bain, V. Siskind, B. Ward, N. Hacker, M. Quinn, G. Wright, P. Russell,

- and B. Susil. “Reproductive and Other Factors and Risk of Epithelial Ovarian Cancer: An Australian Case-Control Study. Survey of Women’s Health Study Group.” *International Journal of Cancer. Journal International Du Cancer* 62, no. 6 (September 15, 1995): 678–84.
- Purdie, David M., Christopher J. Bain, Victor Siskind, Penelope M. Webb, and Adèle C. Green. “Ovulation and Risk of Epithelial Ovarian Cancer.” *International Journal of Cancer. Journal International Du Cancer* 104, no. 2 (March 20, 2003): 228–32.
- Radic, I, I Vucak, J Milosevic, A Marusic, S Vukicevic, and M Marusic. “Immunosuppression Induced by Talc Granulomatosis in the Rat.” *Clinical and Experimental Immunology* 73, no. 2 (August 1988): 316–21.
- Ramus, Susan J., Antonis C. Antoniou, Karoline B. Kuchenbaecker, Penny Soucy, Jonathan Beesley, Xiaoqing Chen, Lesley McGuffog, et al. “Ovarian Cancer Susceptibility Alleles and Risk of Ovarian Cancer in BRCA1 and BRCA2 Mutation Carriers.” *Human Mutation* 33, no. 4 (April 2012): 690–702.
- Rasool, Nabila, Amanda Nickles Fader, Leigh Seamon, Nikki L. Neubauer, Fadi Abu Shahin, Heather A. Alexander, Kathleen Moore, et al. “Stage I, Grade 3 Endometrioid Adenocarcinoma of the Endometrium: An Analysis of Clinical Outcomes and Patterns of Recurrence.” *Gynecologic Oncology* 116, no. 1 (January 2010): 10–14.
- Rayburn, Elizabeth R., Scharri J. Ezell, and Ruiwen Zhang. “Anti-Inflammatory Agents for Cancer Therapy.” *Molecular and Cellular Pharmacology* 1, no. 1 (2009): 29–43.
- Rebbeck, Timothy R., Nandita Mitra, Fei Wan, Olga M. Sinilnikova, Sue Healey, Lesley McGuffog, Sylvie Mazoyer, et al. “Association of Type and Location of BRCA1 and BRCA2 Mutations with Risk of Breast and Ovarian Cancer.” *JAMA* 313, no. 13 (April 7, 2015): 1347–61.
- “Reference Manual on Scientific Evidence” Third Edition (2011).
- Rehman, Ghana, et al. “Determination of Toxic Heavy Metals in Different Brands of Talcum Powder.” *International Journal of Applied and Natural Sciences (IJANS)*; Vol. 2, Issue 2; (May 2013): 45-52.
- Reid, A., J. Heyworth, N. de Klerk, and A. W. Musk. “The Mortality of Women Exposed Environmentally and Domestically to Blue Asbestos at Wittenoom, Western Australia.” *Occupational and Environmental Medicine* 65, no. 11 (November 2008): 743–49.
- Reid, A., N. de Klerk, and A. W. Musk. “Does Exposure to Asbestos Cause Ovarian Cancer? A Systematic Literature Review and Meta-Analysis.” *Cancer Epidemiology Biomarkers & Prevention* 20, no. 7 (July 1, 2011): 1287–95.
- Reid, A., N. H. de Klerk, C. Magnani, D. Ferrante, G. Berry, A. W. Musk, and E. Merler. “Mesothelioma Risk after 40 Years since First Exposure to Asbestos: A Pooled Analysis.” *Thorax* 69, no. 9 (September 2014): 843–50.
- Reid, Alison, Amanda Segal, Jane S. Heyworth, Nicholas H. de Klerk, and Arthur W. Musk. “Gynecologic and Breast Cancers in Women after Exposure to Blue Asbestos at Wittenoom.” *Cancer Epidemiology, Biomarkers & Prevention: A Publication of the American Association for Cancer Research, Cosponsored by the American Society of Preventive Oncology* 18, no. 1 (January 2009): 140–47.
- Reid, Brett M., Jennifer B. Permuth, and Thomas A. Sellers. “Epidemiology of Ovarian Cancer: A Review.” *Cancer Biology & Medicine* 14, no. 1 (February 2017): 9–32.
- Reinhold, Robert. “Panel Finds Danger to the Environment from Technology.” *New York Times*; (December 29, 1968).

- Reuter, Simone, Subash C. Gupta, Madan M. Chaturvedi, and Bharat B. Aggarwal. "Oxidative Stress, Inflammation, and Cancer: How Are They Linked?" *Free Radical Biology and Medicine* 49, no. 11 (December 1, 2010): 1603–16.
- Rice, Megan S., Susan E. Hankinson, and Shelley S. Tworoger. "Tubal Ligation, Hysterectomy, Unilateral Oophorectomy, and Risk of Ovarian Cancer in the Nurses' Health Studies." *Fertility and Sterility* 102, no. 1 (July 2014): 192–198.e3. <https://doi.org/10.1016/j.fertnstert.2014.03.041>.
- Ring, Kari L., Christine Garcia, Martha H. Thomas, and Susan C. Modesitt. "Current and Future Role of Genetic Screening in Gynecologic Malignancies." *American Journal of Obstetrics and Gynecology* 217, no. 5 (2017): 512–21.
- Riska, A., J. I. Martinsen, K. Kjaerheim, E. Lynge, P. Sparen, L. Tryggvadottir, E. Weiderpass, and E. Pukkala. "Occupation and Risk of Primary Fallopian Tube Carcinoma in Nordic Countries." *International Journal of Cancer* 131, no. 1 (July 1, 2012): 186–92. <https://doi.org/10.1002/ijc.26337>.
- Roggli, Victor L., Robin T. Vollmer, Kelly J. Butnor, and Thomas A. Sporn. "Tremolite and Mesothelioma." *Annals of Occupational Hygiene* 46, no. 5 (July 1, 2002): 447–53.
- Rohl, A. N. "Asbestos in Talc." *Environmental Health Perspectives* 9 (December 1974): 129–32.
- Rohl, A. N., A. M. Langer, I. J. Selikoff, A. Tordini, R. Klimentidis, D. R. Bowes, and D. L. Skinner. "Consumer Talcums and Powders: Mineral and Chemical Characterization." *Journal of Toxicology and Environmental Health* 2, no. 2 (November 1976): 255–84.
- Roodhouse Gloyne, S. "Two Cases of Squamous Carcinoma of the Lung Occurring in Asbestosis." *Tubercle* 17, no. 1 (October 1935): 5-IN2.
- Rosalind A. Eeles, Christine D. Berg, and Jeffery S. Tobias. *Cancer Prevention and Screening: Concepts, Principles and Controversies*. 1st ed. Accessed August 21, 2018. Rosenblatt, K. A., M. Szklo, and N. B. Rosenshein. "Mineral Fiber Exposure and the Development of Ovarian Cancer." *Gynecologic Oncology* 45, no. 1 (April 1992): 20–25.
- Rosenblatt, Karin A., Noel S. Weiss, Kara L. Cushing-Haugen, Kristine G. Wicklund, and Mary Anne Rossing. "Genital Powder Exposure and the Risk of Epithelial Ovarian Cancer." *Cancer Causes & Control: CCC* 22, no. 5 (May 2011): 737–42.
- Rösler, J. A., H. J. Woitowitz, H. J. Lange, R. H. Woitowitz, K. Ulm, and K. Rödelsperger. "Mortality Rates in a Female Cohort Following Asbestos Exposure in Germany." *Journal of Occupational Medicine.: Official Publication of the Industrial Medical Association* 36, no. 8 (August 1994): 889–93.
- Ross, M. "Geology, Asbestos, and Health." *Environmental Health Perspectives* 9 (December 1974): 123–24.
- Rothman, Kenneth J., Sander Greenland, and Timothy L. Lash. *Modern Epidemiology*. Lippincott Williams & Wilkins, 2008.
- Saed, Ghassan M., Rouba Ali-Fehmi, Zhong L. Jiang, Nicole M. Fletcher, Michael P. Diamond, Husam M. Abu-Soud, and Adnan R. Munkarah. "Myeloperoxidase Serves as a Redox Switch That Regulates Apoptosis in Epithelial Ovarian Cancer." *Gynecologic Oncology* 116, no. 2 (February 2010): 276–81. <https://doi.org/10.1016/j.ygyno.2009.11.004>.
- Saed, Ghassan M., Michael P. Diamond, and Nicole M. Fletcher. "Updates of the Role of Oxidative Stress in the Pathogenesis of Ovarian Cancer." *Gynecologic Oncology* 145, no. 3 (June 2017): 595–602. <https://doi.org/10.1016/j.ygyno.2017.02.033>.
- Saed, Ghassan M., Nicole M. Fletcher, Michael P. Diamond, Robert T. Morris, Nardhy Gomez-Lopez, and Ira Memaj. "Novel Expression of CD11b in Epithelial Ovarian

- Cancer: Potential Therapeutic Target.” *Gynecologic Oncology* 148, no. 3 (2018): 567–75.
- Saed, Ghassan M., Robert T. Morris, and Nicole M. Fletcher. *New Insights into the Pathogenesis of Ovarian Cancer: Oxidative Stress*, 2018.
- Schelz, John P. “The Detection of Chrysotile Asbestos at Low Levels in Talc by Differential Thermal Analysis.” *Thermochimica Acta*, 8 (1974) 197-204.
- Schenken, Robert S. “Endometriosis: Pathogenesis, Clinical Features, and Diagnosis.” *UpToDate*, 2018.
- Schildkraut, Joellen M., Sarah E. Abbott, Anthony J. Alberg, Elisa V. Bandera, Jill S. Barnholtz-Sloan, Melissa L. Bondy, Michele L. Cote, et al. “Association between Body Powder Use and Ovarian Cancer: The African American Cancer Epidemiology Study (AACES).” *Cancer Epidemiology, Biomarkers & Prevention: A Publication of the American Association for Cancer Research, Cosponsored by the American Society of Preventive Oncology* 25, no. 10 (2016): 1411–17.
- Seeler, Albert O., M.D. “Toxic Hazards, Talc Pneumoconiosis.” *The New England Journal of Medicine*; Vol. 261, No. 21 (Nov. 19, 1959) 1084-1085.
- “SEER Cancer Statistics Review, 1975-2015, National Cancer Institute, Bethesda, MD, Based on November 2017 SEER Data Submission, Posted to the SEER Web Site,” April 2018.
- Selikoff, Irving J., et al. “Asbestos Exposure and Neoplasia.” *JAMA*, Vol. 188, No. 1 (April 6, 1964) 142-146.
- Shan, Weiwei, and Jinsong Liu. “Inflammation: A Hidden Path to Breaking the Spell of Ovarian Cancer.” *Cell Cycle* 8, no. 19 (2009): 3107–11.
- Shukla, Arti, Maximilian B. MacPherson, Jedd Hillegass, Maria E. Ramos-Nino, Vlada Alexeeva, Pamela M. Vacek, Jeffrey P. Bond, Harvey I. Pass, Chad Steele, and Brooke T. Mossman. “Alterations in Gene Expression in Human Mesothelial Cells Correlate with Mineral Pathogenicity.” *American Journal of Respiratory Cell and Molecular Biology* 41, no. 1 (July 2009): 114–23.
- Shushan, A., O. Paltiel, J. Iscovich, U. Elchalal, T. Peretz, and J. G. Schenker. “Human Menopausal Gonadotropin and the Risk of Epithelial Ovarian Cancer.” *Fertility and Sterility* 65, no. 1 (January 1996): 13–18.
- Singh, Naveena, C. Blake Gilks, Lynn Hirschowitz, Sean Kehoe, Iain A. McNeish, Dianne Miller, Raj Naik, Nafisa Wilkinson, and W. Glenn McCluggage. “Primary Site Assignment in Tubo-Ovarian High-Grade Serous Carcinoma: Consensus Statement on Unifying Practice Worldwide.” *Gynecologic Oncology* 141, no. 2 (2016): 195–98.
- Sjösten, A. C. E., H. Ellis, and G. a. B. Edelstam. “Retrograde Migration of Glove Powder in the Human Female Genital Tract.” *Human Reproduction* 19, no. 4 (April 1, 2004): 991–95.
- Soini, Tuuli, Ritva Hurskainen, Seija Grénman, Johanna Mäenpää, Jorma Paavonen, and Eero Pukkala. “Cancer Risk in Women Using the Levonorgestrel-Releasing Intrauterine System in Finland.” *Obstetrics and Gynecology* 124, no. 2 Pt 1 (August 2014): 292–99.
- Soong, Thing Rinda, Brooke E. Howitt, Alexander Miron, Neil S. Horowitz, Frank Campbell, Colleen M. Feltmate, Michael G. Muto, et al. “Evidence for Lineage Continuity between Early Serous Proliferations (ESPs) in the Fallopian Tube and Disseminated High-Grade Serous Carcinomas.” *The Journal of Pathology*, July 25, 2018.
- Stanton, M. F., M. Layard, A. Tegeris, E. Miller, M. May, E. Morgan, and A. Smith. “Relation of Particle Dimension to Carcinogenicity in Amphibole Asbestoses and Other Fibrous Minerals.” *Journal of the National Cancer Institute* 67, no. 5 (November 1981): 965–75.
- Starman, Daniel H., Leslie A. Litzky, and Larry R. Kaiser. “Epidemiology of Malignant Pleural

- Mesothelioma.” *UpToDate*, 2018.
- Steiling, W., J. F. Almeida, H. Assaf Vandecasteele, S. Gilpin, T. Kawamoto, L. O’Keeffe, G. Pappa, K. Rettinger, H. Rothe, and A. M. Bowden. “Principles for the Safety Evaluation of Cosmetic Powders.” *Toxicology Letters*, August 17, 2018.
- Steiling, W., M. Bascompta, P. Carthew, G. Catalano, N. Corea, A. D’Haese, P. Jackson, et al. “Principle Considerations for the Risk Assessment of Sprayed Consumer Products.” *Toxicology Letters* 227, no. 1 (May 16, 2014): 41–49.
- Stewart, Louise M., C. D’Arcy J. Holman, Patrick Aboagye-Sarfo, Judith C. Finn, David B. Preen, and Roger Hart. “In Vitro Fertilization, Endometriosis, Nulliparity and Ovarian Cancer Risk.” *Gynecologic Oncology* 128, no. 2 (February 2013): 260–64.
- Stewart, Louise M., Katrina Spilsbury, Susan Jordan, Colin Stewart, C. D’Arcy J. Holman, Aime Powell, Joanne Reekie, and Paul Cohen. “Risk of High-Grade Serous Ovarian Cancer Associated with Pelvic Inflammatory Disease, Parity and Breast Cancer.” *Cancer Epidemiology* 55 (August 2018): 110–16.
- Straif, Kurt. “Update of the Scientific Evidence on Asbestos and Cancer.” presented at the International Conference on Environmental and Occupational Determinants of Cancer: Interventions for Primary Prevention, Asturias (Avilés, Gijón), Spain, March 17, 2011.
- Suzui, Masumi, et al. “Multiwalled Carbon Nanotubes Intratracheally Instilled into the Rat Lung Induce Development of Pleural Malignant Mesothelioma and Lung Tumors.” *Cancer Sci*, 107 (2016) 924-935.
- “Talc.” *IARC Monographs on the Evaluation of the Carcinogenic Risk of Chemicals to Humans* 42 (1987): 185–224.
- Tarchi, M., D. Orsi, P. Comba, M. De Santis, R. Pirastu, G. Battista, and M. Valiani. “Cohort Mortality Study of Rock Salt Workers in Italy.” *American Journal of Industrial Medicine* 25, no. 2 (February 1994): 251–56.
- Terry, Kathryn L., Stalo Karageorgi, Yurii B. Shvetsov, Melissa A. Merritt, Galina Lurie, Pamela J. Thompson, Michael E. Carney, et al. “Genital Powder Use and Risk of Ovarian Cancer: A Pooled Analysis of 8,525 Cases and 9,859 Controls.” *Cancer Prevention Research (Philadelphia, Pa.)* 6, no. 8 (August 2013): 811–21.
- Tewari, Devansu, James J. Java, Ritu Salani, Deborah K. Armstrong, Maurie Markman, Thomas Herzog, Bradley J. Monk, and John K. Chan. “Long-Term Survival Advantage and Prognostic Factors Associated with Intraperitoneal Chemotherapy Treatment in Advanced Ovarian Cancer: A Gynecologic Oncology Group Study.” *Journal of Clinical Oncology: Official Journal of the American Society of Clinical Oncology* 33, no. 13 (May 1, 2015): 1460–66.
- Thai, T. H., F. Du, J. T. Tsan, Y. Jin, A. Phung, M. A. Spillman, H. F. Massa, et al. “Mutations in the BRCA1-Associated RING Domain (BARD1) Gene in Primary Breast, Ovarian and Uterine Cancers.” *Human Molecular Genetics* 7, no. 2 (February 1998): 195–202.
- Thomas, Charles A., and Major G. Seelig. Powder lubricated surgeon’s rubber glove. United States US2621333A, filed June 27, 1947, and issued December 16, 1952.
- Torre, Lindsey A., Britton Trabert, Carol E. DeSantis, Kimberly D. Miller, Goli Samimi, Carolyn D. Runowicz, Mia M. Gaudet, Ahmedin Jemal, and Rebecca L. Siegel. “Ovarian Cancer Statistics, 2018.” *CA: A Cancer Journal for Clinicians* 68, no. 4 (July 2018): 284–96.
- Trabert, Britton. “Body Powder and Ovarian Cancer Risk – What Is the Role of Recall Bias?” *Cancer Epidemiology, Biomarkers & Prevention: A Publication of the American*

- Association for Cancer Research, Cosponsored by the American Society of Preventive Oncology* 25, no. 10 (October 2016): 1369–70.
- Trabert, Britton, Ligia Pinto, Patricia Hartge, Troy Kemp, Amanda Black, Mark E. Sherman, Louise A. Brinton, et al. “Pre-Diagnostic Serum Levels of Inflammation Markers and Risk of Ovarian Cancer in the Prostate, Lung, Colorectal and Ovarian Cancer (PLCO) Screening Trial.” *Gynecologic Oncology* 135, no. 2 (November 2014): 297–304.
- Trabert, Britton, Elizabeth M Poole, Emily White, Kala Visvanathan, Hans-Olov Adami, Garnet L Anderson, Theodore M Brasky, et al. “Analgesic Use and Ovarian Cancer Risk: An Analysis in the Ovarian Cancer Cohort Consortium.” *JNCI: Journal of the National Cancer Institute* 105, no. 11 (November 2012): 1663–72.
- Trabert, Britton, Elizabeth M. Poole, Emily White, Kala Visvanathan, Hans-Olov Adami, Garnet L. Anderson, Theodore M. Brasky, et al. “Analgesic Use and Ovarian Cancer Risk: An Analysis in the Ovarian Cancer Cohort Consortium.” *Journal of the National Cancer Institute* 111, no. 2 (2019).
- Tsilibidis, K K, N E Allen, T J Key, L Dossus, A Lukanova, K Bakken, E Lund, et al. “Oral Contraceptive Use and Reproductive Factors and Risk of Ovarian Cancer in the European Prospective Investigation into Cancer and Nutrition.” *British Journal of Cancer* 105, no. 9 (October 25, 2011): 1436–42.
- Tsilibidis, Konstantinos K., Naomi E. Allen, Timothy J. Key, Laure Dossus, Rudolf Kaaks, Kjersti Bakken, Eiliv Lund, et al. “Menopausal Hormone Therapy and Risk of Ovarian Cancer in the European Prospective Investigation into Cancer and Nutrition.” *Cancer Causes & Control: CCC* 22, no. 8 (August 2011): 1075–84.
- Tworoger, Shelley S., Kathleen M. Fairfield, Graham A. Colditz, Bernard A. Rosner, and Susan E. Hankinson. “Association of Oral Contraceptive Use, Other Contraceptive Methods, and Infertility with Ovarian Cancer Risk.” *American Journal of Epidemiology* 166, no. 8 (October 15, 2007): 894–901.
- Tzonou, A., A. Polychronopoulou, C. C. Hsieh, A. Rebelakos, A. Karakatsani, and D. Trichopoulos. “Hair Dyes, Analgesics, Tranquilizers and Perineal Talc Application as Risk Factors for Ovarian Cancer.” *International Journal of Cancer. Journal International Du Cancer* 55, no. 3 (September 30, 1993): 408–10.
- US EPA. “Health Assessment Document for Talc. | National Technical Reports Library - NTIS.” -600/8-91/217, 1992.
- Vallyathan, N. Val, Ph.D., et al. “Pulmonary Pathology in Workers Exposed to Nonasbestiform Talc.” *Human Pathology*, Vol. 12, No. 1 (January 1981) 28–35.
- Van Gosen, B. S., H.A. Lowers, S.J. Sutley, and C.A. Gent. “Using the Geologic Setting of Talc Deposits as an Indicator of Amphibole Asbestos Content.” *Environmental Geology* 45, no. 7 (2004): 20.
- Van Huisstede, A., et al. “Talcosis Due to Abundant Use of Cosmetic Talcum Powder.” *European Respiratory Review*, Vol. 19, No. 116 (2010) 165–168.
- Vanderhyden, Barbara C, Tanya J Shaw, and Jean-François Ethier. “Animal Models of Ovarian Cancer.” *Reproductive Biology and Endocrinology: RB&E* 1 (October 7, 2003): 67.
- Van Orden, D. “Weight Percent Compositional Analysis of Seven RTV Talc Samples. Analytical Report to R. T. Vanderbilt Company, Inc. Submitted to Public Comments Record – C. W. Jameson, National Toxicology Program, 10th ROC Nominations ‘Talc (Containing Asbestiform Fibers)’. 4 December 2000., National Toxicology Program.,” November 22, 2000.
- Vasama-Neuvonen, K., E. Pukkala, H. Paakkulainen, P. Mutanen, E. Weiderpass, P. Boffetta, N.

- Shen, T. Kauppinen, H. Vainio, and T. Partanen. "Ovarian Cancer and Occupational Exposures in Finland." *American Journal of Industrial Medicine* 36, no. 1 (July 1999): 83–89.
- Vasey, Paul A., Gordon C. Jayson, Alan Gordon, Hani Gabra, Rob Coleman, Ronnie Atkinson, David Parkin, et al. "Phase III Randomized Trial of Docetaxel-Carboplatin versus Paclitaxel-Carboplatin as First-Line Chemotherapy for Ovarian Carcinoma." *Journal of the National Cancer Institute* 96, no. 22 (November 17, 2004): 1682–91.
- Venkatesan, Priya. "Possible X Chromosome-Linked Transmission of Ovarian Cancer." *The Lancet. Oncology* 19, no. 4 (April 2018): e185.
- Venter, P. F., and M. Iturralde. "Migration of a Particulate Radioactive Tracer from the Vagina to the Peritoneal Cavity and Ovaries." *South African Medical Journal = Suid-Afrikaanse Tydskrif Vir Geneeskunde* 55, no. 23 (June 2, 1979): 917–19.
- Verdoodt, Freija, Christian Dehlendorff, Søren Friis, and Susanne K. Kjaer. "Non-Aspirin NSAID Use and Ovarian Cancer Mortality." *Gynecologic Oncology* 150, no. 2 (2018): 331–37. <https://doi.org/10.1016/j.ygyno.2018.06.018>.
- Vicus, Danielle, Amy Finch, Barry Rosen, Isabel Fan, Linda Bradley, Ilana Cass, Ping Sun, et al. "Risk Factors for Carcinoma of the Fallopian Tube in Women with and without a Germline BRCA Mutation." *Gynecologic Oncology* 118, no. 2 (August 1, 2010): 155–59. <https://doi.org/10.1016/j.ygyno.2010.03.009>.
- Vineis, Paolo, Phyllis Illari, and Federica Russo. "Causality in Cancer Research: A Journey through Models in Molecular Epidemiology and Their Philosophical Interpretation." *Emerging Themes in Epidemiology* 14, no. 7 (2017).
- Virta, RL. "The Phase Relationship of Talc and Amphiboles in a Fibrous Talc Sample." IH; Report of Investigations, 1985. <https://www.cdc.gov/niosh/nioshtic-2/10004328.html>.
- Vitonis, Allison F., Linda Titus-Ernstoff, and Daniel W. Cramer. "Assessing Ovarian Cancer Risk When Considering Elective Oophorectomy at the Time of Hysterectomy." *Obstetrics and Gynecology* 117, no. 5 (May 2011): 1042–50.
- Wang, Chunpeng, Zhenzhen Liang, Xin Liu, Qian Zhang, and Shuang Li. "The Association between Endometriosis, Tubal Ligation, Hysterectomy and Epithelial Ovarian Cancer: Meta-Analyses." *International Journal of Environmental Research and Public Health* 13, no. 11 (November 14, 2016): 1138.
- Wang, Dingzhi, et al. "Immunosuppression Associated with Chronic Inflammation in the Tumor Microenvironment." *Carcinogenesis*, Vol. 36, No. 10 (2015): 1085–1093.
- Wang, Xiaorong, Sihao Lin, Ignatius Yu, Hong Qiu, Yajia Lan, and Eiji Yano. "Cause-Specific Mortality in a Chinese Chrysotile Textile Worker Cohort." *Cancer Science* 104, no. 2 (February 2013): 245–49.
- Watson, Ian R., Koichi Takahashi, P. Andrew Futreal, and Lynda Chin. "Emerging Patterns of Somatic Mutations in Cancer." *Nature Reviews. Genetics* 14, no. 10 (October 2013): 703–18.
- Wehner, A. P., A. S. Hall, R. E. Weller, E. A. Lepel, and R. E. Schirmer. "Do Particles Translocate from the Vagina to the Oviducts and Beyond?" *Food and Chemical Toxicology: An International Journal Published for the British Industrial Biological Research Association* 23, no. 3 (March 1985): 367–72.
- Wehner, A. P., R. E. Weller, and E. A. Lepel. "On Talc Translocation from the Vagina to the Oviducts and Beyond." *Food and Chemical Toxicology: An International Journal Published for the British Industrial Biological Research Association* 24, no. 4 (April

- 1986): 329–38.
- Weiss, W. “Cigarette Smoking and Lung Cancer Trends. A Light at the End of the Tunnel?” *Chest* 111, no. 5 (May 1997): 1414–16.
- Wells, I.P., et al. “Pulmonary Disease Caused By the Inhalation of Cosmetic Talcum Powder.” *British Journal of Radiology*, Vol. 52, No. 619; (July 1979) 586–588.
- Wentzensen, Nicolas, Elizabeth M. Poole, Britton Trabert, Emily White, Alan A. Arslan, Alpa V. Patel, V. Wendy Setiawan, et al. “Ovarian Cancer Risk Factors by Histologic Subtype: An Analysis from the Ovarian Cancer Cohort Consortium.” *Journal of Clinical Oncology: Official Journal of the American Society of Clinical Oncology* 34, no. 24 (2016): 2888–98.
- Werner, I. “Presence of Asbestos in Talc Samples.” *Atemschutzinform* 21, no. 5 (1982).
- West, Sophie D., et al. “Pleurodesis for Malignant Pleural Effusions: Current Controversies and Variations in Practices.” *Curr Opin Pulm Med* 10, *Diseases in the Pleura*, (2004) 305–310.
- Whiteman, David C., Michael F. G. Murphy, Linda S. Cook, Daniel W. Cramer, Patricia Hartge, Polly A. Marchbanks, Philip C. Nasca, Roberta B. Ness, David M. Purdie, and Harvey A. Risch. “Multiple Births and Risk of Epithelial Ovarian Cancer.” *Journal of the National Cancer Institute* 92, no. 14 (July 19, 2000): 1172–77.
- Whittemore, A. S., R. Harris, and J. Itnyre. “Characteristics Relating to Ovarian Cancer Risk: Collaborative Analysis of 12 US Case-Control Studies. IV. The Pathogenesis of Epithelial Ovarian Cancer. Collaborative Ovarian Cancer Group.” *American Journal of Epidemiology* 136, no. 10 (November 15, 1992): 1212–20.
- Whittemore, A. S., M. L. Wu, R. S. Paffenbarger, D. L. Sarles, J. B. Kampert, S. Grosser, D. L. Jung, S. Ballon, and M. Hendrickson. “Personal and Environmental Characteristics Related to Epithelial Ovarian Cancer. II. Exposures to Talcum Powder, Tobacco, Alcohol, and Coffee.” *American Journal of Epidemiology* 128, no. 6 (December 1988): 1228–40.
- Whysner, J., and M. Mohan. “Perineal Application of Talc and Cornstarch Powders: Evaluation of Ovarian Cancer Risk.” *American Journal of Obstetrics and Gynecology* 182, no. 3 (March 2000): 720–24.
- Wignall, B.K., and A.J. Fox. “Mortality of Female Gas Mask Assemblers.” *British Journal of Industrial Medicine* 39, no. 1 (1982): 34–38.
- Wild, P. “Lung Cancer Risk and Talc Not Containing Asbestiform Fibres: A Review of the Epidemiological Evidence.” *Occupational and Environmental Medicine* 63, no. 1 (January 2006): 4–9.
- Wolff, Henrik, Tapio Vehmas, Panu Oksa, Jorma Rantanen, and Harri Vainio. “Asbestos, Asbestosis, and Cancer, the Helsinki Criteria for Diagnosis and Attribution 2014: Recommendations.” *Scandinavian Journal of Work, Environment & Health* 41, no. 1 (January 2015): 5–15.
- Wong, C., R. E. Hempling, M. S. Piver, N. Natarajan, and C. J. Mettlin. “Perineal Talc Exposure and Subsequent Epithelial Ovarian Cancer: A Case-Control Study.” *Obstetrics and Gynecology* 93, no. 3 (March 1999): 372–76.
- Woodruff, J. D. “The Pathogenesis of Ovarian Neoplasia.” *The Johns Hopkins Medical Journal* 144, no. 4 (April 1979): 117–20.
- Wright, H. R., J. C. Wheeler, J. A. Woods, J. Hesford, P. Taylor, and R. F. Edlich. “Potential Toxicity of Retrograde Uterine Passage of Particulate Matter.” *Journal of Long-Term*

- Effects of Medical Implants* 6, no. 3–4 (1996): 199–206.
- Wu, A. H., C. L. Pearce, C.-C. Tseng, and M. C. Pike. “African Americans and Hispanics Remain at Lower Risk of Ovarian Cancer Than Non-Hispanic Whites after Considering Nongenetic Risk Factors and Oophorectomy Rates.” *Cancer Epidemiology Biomarkers & Prevention* 24, no. 7 (July 1, 2015): 1094–1100.
- Wu, Anna H., Celeste L. Pearce, Chiu-Chen Tseng, and Malcolm C. Pike. “African Americans and Hispanics Remain at Lower Risk of Ovarian Cancer Than Non-Hispanic Whites after Considering Nongenetic Risk Factors and Oophorectomy Rates.” *Cancer Epidemiology, Biomarkers & Prevention: A Publication of the American Association for Cancer Research, Cosponsored by the American Society of Preventive Oncology* 24, no. 7 (July 2015): 1094–1100.
- Wu, Anna H., Celeste L. Pearce, Chiu-Chen Tseng, Claire Templeman, and Malcolm C. Pike. “Markers of Inflammation and Risk of Ovarian Cancer in Los Angeles County.” *International Journal of Cancer. Journal International Du Cancer* 124, no. 6 (March 15, 2009): 1409–15.
- Wu, Song, Wei Zhu, Patricia Thompson, and Yusuf A. Hannun. “Evaluating Intrinsic and Non-Intrinsic Cancer Risk Factors.” *Nature Communications* 9, no. 1 (August 28, 2018): 3490.
- Yan, Bin, Yuanlin Peng, and Chuan-Yuan Li. “Molecular Analysis of Genetic Instability Caused by Chronic Inflammation.” *Methods in Molecular Biology (Clifton, N.J.)* 512 (2009): 15–28.
- Yan, Bin, Huili Wang, Zahid Rabbani, Yulin Zhao, Wenrong Li, Yuqing Yuan, Fang Li, Mark W. Dewhirst, and Chuan-Yuan Li. “Tumor Necrosis Factor-a Is a Potent Endogenous Mutagen That Promotes Cellular Transformation.” *Cancer Research* 66 (December 15, 2006): 11565.
- “You Can Steer Clients to Condoms Free from Potentially Harmful Talc: Condom Companies Agree to Produce without the Dry Lubricant.” *Contraceptive Technology Update* 16, no. 11 (November 1995): 133–44.
- Zazenski, R., W. H. Ashton, D. Briggs, M. Chudkowski, J. W. Kelse, L. MacEachern, E. F. McCarthy, M. A. Nordhauser, M. T. Roddy, and N. M. Teetsel. “Talc: Occurrence, Characterization, and Consumer Applications.” *Regulatory Toxicology and Pharmacology: RTP* 21, no. 2 (April 1995): 218–29.
- Zervomanoklakis, I., H.W. Ott, D Hadzimerovic, V. Mattle, B.E. Seeber, I. Virgolini, D. Heute, S. Kissler, G. Leyendecker, and L. Wildt. “Physiology of Upward Transport in the Human Female Genital Tract.” *Annals of New York Academy of Sciences* 1101, no. 1 (2007): 1–20.
- Zhao, Weixing, Justin B. Steinfeld, Fengshan Liang, Xiaoyong Chen, David G. Maranon, Chu Jian Ma, Youngho Kwon, et al. “BRCA1-BARD1 Promotes RAD51-Mediated Homologous DNA Pairing.” *Nature* 550, no. 7676 (19 2017): 360–65.

DEPOSITIONS, TRANSCRIPTS AND REPORTS:

Affidavit of Laura Plunkett, PhD 02.22.18

Deposition of Alice Blount in the Ingham v. J&J Matter on 04.13.18

Deposition of Annie Awanais Yessian on 07.13.2017

Deposition and Exhibits of Pat Downey Dated 8.7.18-8.8.18
Deposition and Exhibits of John Hopkins Dated 8.16.18-8.17.18, 10.17.18 and 11.05.18
Deposition and Exhibits of Susan Nicholson Dated 7.26.18-7.27.18
Deposition and Exhibits of Julie Pier Dated 9.12.18-9.13.18
Ingham v. J&J Volume 11 (Egilman, Koman, Martinez, Packard) 6-14-18
Ingham v. J&J Volume 14A (Madigan, Williams) 6-20-18
Ingham v. JJ Volume 24A (Warner Huh, MD) 7.5.18
Ingham v. JJ Volume 24B (Warner Huh, MD) 7.5.18
John J. Godleski Expert Report for Brower Matter Dated 6.23.18
Lanzo Plaintiffs MIL re Imerys Spoliation and Concealment of Talc Samples
Laura Plunkett - Supplemental Expert Brower Report
Longo Analysis of J&J's Historical Talc Samples from the 1960's
Longo Analysis of J&J's Historical Talc Samples from the 1970's
Longo Analysis of J&J's Historical Talc Samples from the 1980's
Longo Analysis of J&J's Historical Talc Samples from the 1990's
Longo Analysis of J&J's Baby Powder Historical Samples - Asian - October 2018
Longo Analysis of J&J's BP Talc Products for Amphibole (Tremolite) Asbestos 8.2.17
Longo Analysis Report_Exhibit BB_04.28.2017
Longo MAS Project 14-1852 Below the Waist Application of Johnson's BP 9.2017
Longo Process Blanks for the Analysis of J&J's Products from the 60's to 90's for Asbestos
Longo TEM Analysis of Historical 1978 Johnson's BP Sample for Amphibole Asbestos 2.16.18
Longo Verification of Lee Poye's TEM Analysis of J&J's Historical Vermont Talc 11.5.18
Michael Crowley Expert Report Dated 11.12.18
Report of Results: MVA11730 Investigation of Italian Talc Samples for Asbestos 08.01.2017
RJLEE-001497
Thomas Dydek Brower Expert Report Dated 8.16.18 (corrected on 8.20.18)
Thomas Dydek Educational Report_FINAL (4-9-2018)
Thomas Dydek MDL Educational Report Dated 4.9.18

OTHER SOURCES:

American Cancer Society Ovarian Cancer Statistics
ATSDR Toxicological Profile for Asbestos
EPA Chemical Assessment Summary for Asbestos - 2017
EPA Guidelines for Carcinogen Risk Assessment - March 2005
EPA Health Assessment Document for Talc - 1992
Exhibit 1 - ATTORNEYS' EYES ONLY
Exhibit 2 - ATTORNEYS' EYES ONLY
Exhibit 3 - ATTORNEYS' EYES ONLY
FDA 4-1-2014 Response Letter to Epstein Denying Petition
Fitzgerald Analysis of J&J Baby Powder #1 and #2 Dated July 26, 2017
IARC Monograph 100C - Arsenic, Metals, Fibres, and Dusts - Excerpts
IARC Monograph 14 - Asbestos - 1977

IARC Monograph 2 - Some Inorganic and Organometallic Compounds - 1973
IARC Monograph 68 - Silica, Some Silicates, Coal Dust and Para-Aramid Fibrils - 1997
IARC Monograph 74 - Surgical Implants and Other Foreign Bodies - 1999
IARC Monograph 82 - Some Traditional Herbal Medicines, Some Mycotoxins, Naphthalene and Styrene - 2002
IARC Monograph 86 - Cobalt in Hard Minerals and Cobalt Sulfate, Gallium Arsenide, Indium Phosphide and Vanadium Pentoxide - 2006
IARC Monograph 87 - Inorganic and Organic Lead Compounds – 2006

IMERYS013188	J&J History
IMERYS045182	J&J S2s and BP Product Analysis - 1972
IMERYS045184	JNJ 000087928
IMERYS048311	JNJ 000088570
IMERYS051370	JNJ 000285351
IMERYS053387	JNJ000025132
IMERYS090653	JNJ000062359
IMERYS098115	JNJ000062436
IMERYS105215	JNJ000063608
IMERYS210136	JNJ000063951
IMERYS210729	JNJ000064544
IMERYS219720	JNJ000064762; JNJ000265171
IMERYS286445	JNJ000065264
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IMERYS241866	JNJ000246437
IMERYS248877	JNJ000251888
IMERYS255101	JNJ000260697
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IMERYS279968	JNJ000347962
IMERYS281335	JNJ000347962
IMERYS281776	JNJ000521616
IMERYS324700	JNJ0000000704
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IMERYS-A_0015663	JNJ000016645

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JNJ000046293	JNJAZ55_000000577
JNJ000245678	JNJAZ55_000000905
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JNJ000265536	JNJMX68_000012858
JNJ000279507	JNJMX68_000013019
JNJ000348778	JNJNL61_000079334
JNJ000404860	
PCPC_MDL00062175	
Pltf_MISC_00000272 (JANSSEN-000001-19)	
NIOSH Occupation Respiratory Diseases September 1986	
NIOSH Preliminary Report on Fiber Exposure During Use of Baby Powders - 1972	
NTP Technical Report on the Toxicology and Carcinogenesis Studies of Talc (CAS No. 14807-96-6)- 1993	
NTP Toxicology and Carcinogenesis Studies of Talc in F344/N Rats and B6C3F Mice Report No. 421	
P-468	
Read-the-Letter-from-the-FDA-on-Cosmetics	
The Birth of Our Baby Products _ Kilmer House	
WCD 002478 - Exhibit 32 Waldstreicher	

Arch Carson, MD, PhD Legal Testimony, 2015-2018

Elaine Hale and Kenneth Dorsey parker, Jr. v. Centerpoint Energy Houston Electric, LLC; in the 55th District Court of Harris County, Texas.

2016 Harris County, TX for Plaintiff

Danny Henderson and Linda Henderson; Magdaleno Flores and Maria Flores; Shari Waldrop; and Bryan Thomas v. Magnablend, Inc., Nugreen Specialty, Inc., Nugreen Solutions, Inc., and Enviro Tech Inc.; in the 40th District Court of Ellis County, Texas.

Arch I. Carson, MD, PhD
Professional Consultation Fee Schedule

Evidence-base research, report preparation, documentation, conference	\$450/hr
Interview, physical examination or medical testing of patients	450/hr
Review of documents	450/hr
Testimony at deposition or trial plus expenses	450/hr
Inspection, examination or sampling of physical evidence or sites	450/hr
Travel (Travel maximum \$4,000 per diem, plus expenses)	200/hr
Laboratory analyses/studies	at cost
Overhead and Supplies	at cost